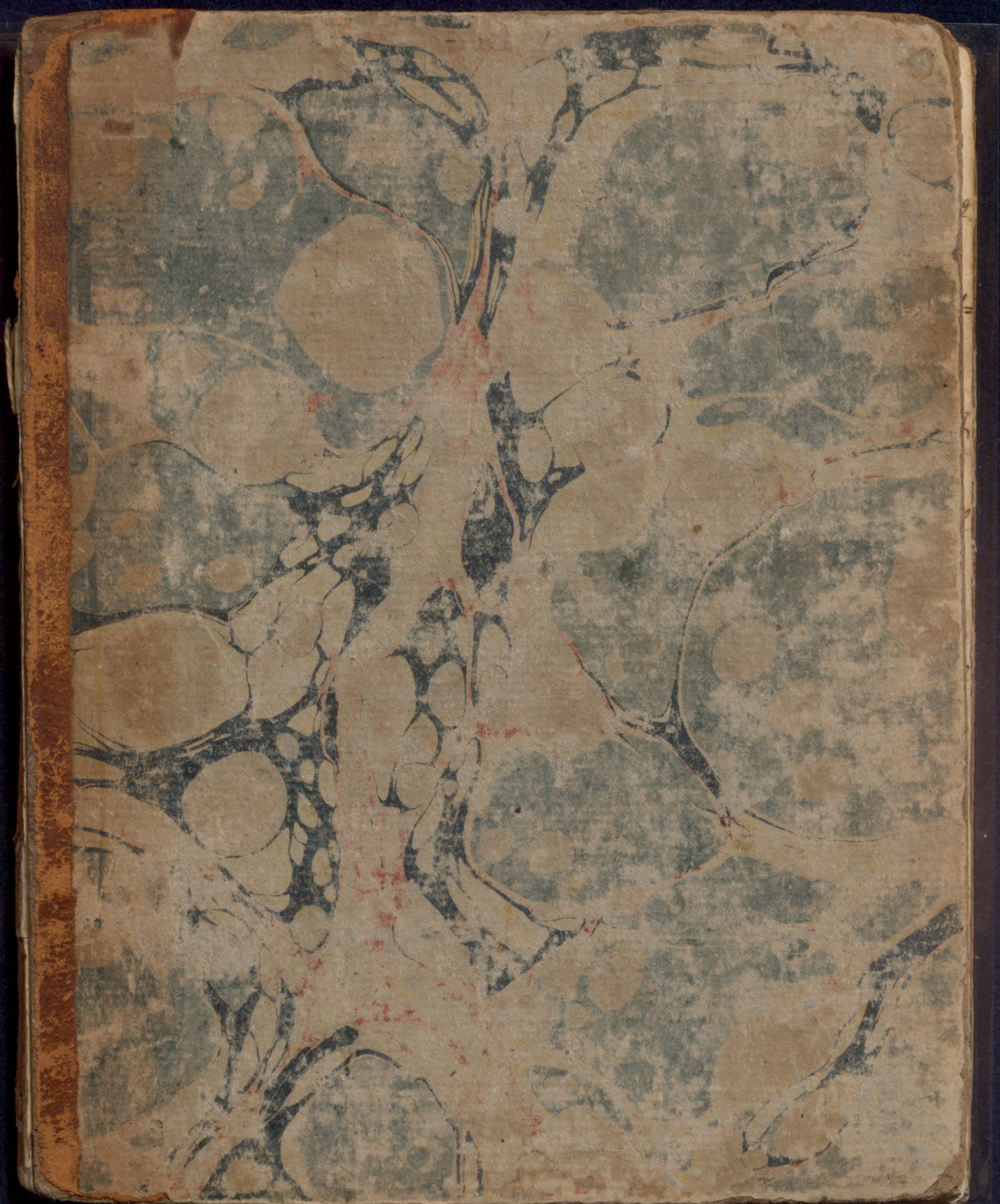




① Fever & Epilepsy

② Apoplexy

③ midwifery - 21 lectures

I think this Book was written by
Dr Charles Knowlton of Chislehurst in Kent Eng.
about 1785, or 1790. It came to this country in
1845 - D.R.F.

Kindly given me by Mrs Foster
of "Darley Place" Knowlton.
Aug 4th - 1901 - R. M. S. -

Fever

1

Some difficulty which perplexed me in attempting

alphabet bookshop

145 MAIN ST. W. PORT COLBORNE, ONTARIO, CANADA L3K 3V3

Member: ABAC/ILAB

905-834-5323

info@alphabet-bookshop.com

Medical text, and teaching notes:. [Circa 1790] Attributed to **Charles Knowlton**, possibly from Kent, UK - came to Canada in 1845.

3 sections: 1 - **Fever** - page 1-45, 2. **Apoplexy** - page 45-71, [2 blanks], 3 - **Midwifery** - pages numbered 1-74.

Fever - Questioning the current understanding of the relation between causes of Epileptic fits & Smallpox fever. The writer, Dr. Charles Knowlton, quotes from Dr. L Cullen, *Practice of Physic*, 1771. - & suggest that he - " shall endeavour to pave the way for another Hypothesis. . ." p. 2. Quotes Sydenham, Dr. Cleghorn; Priestly: discoverer of oxygen; Dr. Huxham; Dr. John Brown: *Elementa Medicinae*, 1780 -[Brown's teacher was Cullen.[- The Brunonian System of Medicine. Brunonian theory of intermittents.]; The writer mentions his personal friend, "ingenious & learned friend Doct. [William] Falconer of Bath," in the section on Fever, page 18 - [Falconer moved to Bath in 1770].

#1260312656

Apoplexy - the writer refers to Flemmyng's Physiology 1759.

Page 60 suggests this was written after 1780 - " Long after the preceding sketches were in their present form all the alteration they have undergone since the year 1780. . ." - page 60. The writer question the Jones/Brown theories.

[Opium mentioned as a "sedative stimulant" mentioned on page 63.]

Midwifery - **Doct. Armes Lectures on Midwifery**. Divided into 21 lectures.

Basic notes on all aspects of midwifery. [Page 22 - "many cunning baggages [ie: women] have brought on a miscarriage by puncturing the Membranes with a probe or a Knitting needle. . ."]

\$400.00

principles & shall confine myself chiefly in the following essay to a
critical examination of the Theory maintained by the justly cele-
brated Cullen, the latest the most ingenious and perhaps the most

① Fever & Epilepsy

② Anger

of "Darley Place" Kewellton.

Aug 4th 1901. R. M. S. D.

Some difficulty which perplexed me in attempting to explain the immediate cause of those epileptic fits which occur just at the eve of the variolous eruption induced me to think that the proximate cause of Epilepsy & of fever very much resembled each other and that the foregoing reasoning might with certain modifications be applied to explain the immediate cause of the latter, this opinion I shall endeavour to establish in the following essay previous to this however it is a duty incumbent on me to state my reasons for objecting to the Hypotheses already advanced, in doing w.^{ch} I do not think it necessary to enter into an Historical detail of every system of reasoning, w.^{ch} has been invented to account for the phenomena of fevers from the days of Hippocrates to the times of Boerhave, Hoffman & Cullen but deem it sufficient to observe that each of those systems have in succession refuted & taken place of that which immediately preceded it upon the same principle I shall confine myself chiefly in the following essay to a critical examination of the Theory maintained by the justly celebrated Cullen, the latest the most ingenious and perhaps the most

2

usefull Hypothesis which has hitherto prevailed and by shewing that this system does not satisfactorily explain some of the most important Phenomena occurring in Fevers, I shall endeavour to pave the way for another Hypothesis which promises to remove several of those difficulties and to reconcile the humoral and nervous Pathologists with each other. let us begin with a summary view of Dr. Cullen's system as delivered by himself in his first lines of the Practice of Physic. Vol. 1.

For example an Ague fit, which come on yesterday at three o'clock in the afternoon, will often return as to day at noon, an interval only of 24 Hours, in another, case, this deviation will be reversed, and the Paroxysm which occur'd yesterday at 3 o'clock will be postponed, to day untill six o'clock, in the afternoon, admitting an interval, of 27 hours, and in a number of cases, you may gain or lose of time will be one, two, three, four, or five hours, exhibiting intervals, of Agues from 19, to 29 hours in those called Quotidians from 43 to 53 in those called, Tertiars and so after the same manner in Intermittents of all other denominations. If a deviation so great to be considered as anticipation, or postponings of the Quotidian or other periods be a subterfuge which as Leon had recourse to, in the doctrine of artificial days of which I shall hereafter take some notice.

When the 12 o'clock Quotidian of yesterday returns as to day at
 the noon I have found my patients alarmed, at what they thought
 an increased violence & frequency of their Ague, where as in re-
 ality, it was uniform in itself as to its intervals of 24 hours
 in like manner from an inattention to this circumstance, or
 rather from relying too implicitly on the common opinion, I
 have been so far deceived, when the 12 o'clock accession of yesterday
 was postponed untill three to day, as to imagine that my
 remedy had in part succeeded and had been the cause of this
 retardation but I found I was led into an error, from counting
 by the clock, whilst the Intermittent, inattentive to our time
 keeper, continued in proportion to its cause, true as the
 needle to the pole, affording an interval of 24 Hours ---
 From an attentive review of these observations it is sufficiently
 obvious, that in a number of returns the accession of fever, must
 take place each case at every different hour of the day and therefore
 cannot possibly depend upon any regular & permanent revol-
 ution of the system. (Dr. Cullen's Idea was that Quotidians come
 on in the Morning, Tertianis at Noon, and Quartanis in the
 afternoon)

4
Afternoon; seems of course not very well founded) - Nay so
little, is the ~~influence~~ influence of these quotidians, Tertians
or aquartan revolutions to be depended on that from a careful
and candid attention to the return of Intermittents, in
some hundred of instances, (I have not found more y.
two cases,) in which the Intermittent has adhered steadily
either to the Quotidian, the Tertian or the Quartan period,
these irregularities then must from their frequency, come
within the observation of every attentive practitioner and
therefore render examples, in some measure superfluous
but as it is more consistent with my general plan, in
every instance where it is in my power to adduce facts in
support of what is advanced, I shall here relate a few cases,
selected without order, or choice, from many others now under
my care, to prove that such deviations are at least by no
means uncommon, and this I shall do in a concise, a manner
as I am able. The Rev. M. W. was seiz'd, with the cold fit of an
Intermittent, Tuesday Dec. 25 at 3 in the afternoon, it
returned again on Thursday exactly at noon, on Saturday

5.

at nine in the Morning and adhered to this interval, of forty five hours, untill it was removed by the Bark, this is in the common way called a tertian or forty eight hour Ague anticipated.

S. Petits Wife has had an Ague three months it goes round as she terms it, that is it gains an hour every day, for example, on Sunday Dec. 29th at 5 in the afternoon, on Tuesday at six, Thursday at 7, regularly Anticipated returns, this comes the nearest, that I have met with out of 40 or 50 instances to the true Tertian period its interval being 47 hours, but as this changes its hour every day it cannot afford, any proof of its power of diurnal revolution.

Miss W. has had five paroxysms of an Intermittent, the first occurred on Wednesday Dec. 20th 1781 at 4 in the afternoon it returned on Friday at one, Sunday at 10 in the Morning, and so on, This postponed Tertian affords an example of 51. hours, I might have adduced numberless other instances, of the same kind, but as these will serve distinctly to convey my meaning it would be only tiring my reader, to no purpose
by

By a dull repetition of similar cases, (D.^r Cullen observes that Quotidians come on in the Morning, Tertians at Noon, and Quartans in the Afternoon, but whenever the returns are anticipated or postponed, we have observed before that part of the day can be progressively exempt and whatever may be regularity in the more Northern parts of this Island, I must repeat, that out of some hundreds of instances, I have not met with above two cases in which the return has kept steadily either to the Quotidian, y.^d tertian or the Quartan period) I am afraid, my reader will think me unpardonably tedious in disgusting this subject, but as the truth or fallacy of D.^r Cullen's Theory depends almost intirely on the existence or none existence of such revolutions and as that system has itself refuted all preceeding ones, appears to me not at all difficult to refute, I thought it necessary to point out at some length the difficulty of admitting such revolutions, and the very slight influence they appear to possess in regulating y.^e return of Intermittents. If D.^r Cullen meant to apply these revolutions, merely to explain the duration, and not the periodical recurrence of Intermittent

I am indeed reasoning without a competitor, but as even the duration of Paroxysm, varies confessedly from one to at least 23 Hours it does not so readily strike common understandings what influence such revolutions, can have in regulating this duration especially as the period of accession is so very uncertain. In what ever light we view this reasoning the explanation it affords does not appear perfectly satisfactory, & Dr. Cullen's system is still incomplete because of return and even the duration of Intermittent paroxysms remain still unaccounted for,

This I hope I have done in a manner tolerably conclusive and satisfactory and in order to prevent our falling into the same error in future of inventing Hypothesis to explain what seems never to have existed, would it not be better to drop altogether, the confusing terms. Quotidian, Tertian, Quartan periods &c, and to distinguish all agues according, to the space between accession and accession into 21--27--33 39-- hour Intermittents &c. Having thus attempted to show that Dr. Cullen's idea of the diurnal revolutions of the system does not satisfactorily explain, the periodical return of

8
Intermittents, I shall adduce no farther arguments, against his general Doctrine except in a cursory way, untill I have delivered what has occurred to me concerning the proximate cause of Fever, Previous to our entering on this inquiry however it will be proper, to take a general view of the remote causes of Fever.

Of the Remote causes of Fever.

Physicians seem now to be pretty universally agreed, that the remote cause of Fever, may all be referred to two general sources, To the effluvia arising from the human body under a state of disease thence called Human effluvia, or to those arising from Marshy Swampy or muddy soil, as that of Ditches newly stirred or thrown out the Banks of Rivers, lately overflowed, Lakes partially dried up and the like, and thence called, Marsh effluvia or Miasmata. Of these, noxious exhalations, some are specific, that is they invariably produce a disease of the same nature. The Variolous poison for example always occasions an eruptive Fever, and of the more continued kind whilst others cannot be termed specific because they do not

9
always produce a disease, singeneris, as when the contagion received from an Intermittent, produces a continued Fever, or when the contagion received from a continued fever produces an Intermittent, circumstance which are by no means uncommon, for we see frequently in the same family, one patient, affected, with an Intermittent, a second to all appearance taking it from him for beyond all doubt from the same source with a remittent, and a third receiving it from the second with a continued fever and of the putrid kind, It would seem therefore, that the remote causes, of Remittent, Intermittent, and continued Fevers, are seldom essentially different in their nature, but, possessing different degrees of activity (from their being more or less concentrated) and acting upon constitutions differently disposed, they sometimes produce one kind of Fever sometimes another --- But as the majority of the inhabitants, of a particular district, or a particular Country must, from the similarity of their circumstances and their manner of life be in a similar state of predisposition it, is no wonder, the same remote cause being applied

applied to all, that the diseases, of particular seasons, should in those districts, bear a general resemblance. This idea of the remote cause of those Fevers, may differ in degree rather than in kind, is supported by the opinions of many ingenious and respectable Physicians (The disease of the preceding Month, are now greatly increased in strength and number, and the Intermittent Fevers now, from a slight error in regimen, run into a kind of putrid Fevers, frequently to the no small danger of the sick. Besides those who have been intirely free from them for some time, relapse: Flux.^m on Air and Epid. diseases. 4p. 1728

It is still to be remarked that as Quartans and Tertians are apt to become Quotidianus these to pass into Remittents and these last to become continued &c. Cullen

And is rendered still more probable when we consider, that, the variolous poison received from the very same person (altho' always attended with an eruption) will in one constitution produce a mild fever of the simple inflammatory kind, in another, a Fever of the most highly putrid and malignant tendency, diseases as different, in their natures and, requiring as opposite modes of treatment, as almost any with w.^{ch}

we are acquainted, besides we know that the fevers above
spoken of are capable of being controverted into each other,
and that it is by no means an uncommon circumstance
to see a fever begining with Ill defined Intermittions, after
a short time become continued, and ultimately by proper
treatments, be restored to a remittent, or proper intermittent.
Whilst a fever assuming at first, the more continued form,
may sometimes by proper management be controverted into
an Intermittent, altho this circumstance is upon the whole
less frequent, than the former, and might naturally be expected
to be so, since the remote cause whatever it may be, instead
of becoming weaker, has (as was before observed) a constant tendency
to become more concentrated and more active, by assimilating
a part of our fluids into its own nature.

Of the Proximate cause of Fever.

How the remote cause operates in producing Fever, whether
it first enters the circulation, or produces its effects immedi-
ately on the nervous system are Questions that after having
puzzled the most acute Physicians in all ages remain
still undecided, altho if fair analogy be omitted as a founda-
tion for argument nothing seems to be more simple
and obvious. I have endeavoured to prove, that the Theory

Of my admirable and much respected Master, ^(Cullen) is in some respects incomplete, and the reasonings there employed, will apply equally to all the Hypothesis which have preceded it. (For there is not one amongst them all which explains in a natural and satisfactory manner the cause of the periodical return of paroxysm, none of them being sufficient in a natural and satisfactory manner to account for the cause of the periodical return of Intermittents to enter therefore into a formal refutation of them in this place would be as superfluous as it is unnecessary) —

For all those theories are equally defective as to the explanation of the regular and periodical return of Intermittents.

In the succeeding pages I shall venture to deliver, an Hypothesis which appears to me more probable and more natural, it is not offered as a complete system, nor as one unencumbered with difficulties but, if we can get upon a chain of reasoning that will explain more of the phenomena, or which coincides more perfectly, with a method of practice generally successful we shall perhaps approach one step nearer the Truth, and render some service to the Community.

Nature seems kindly to have provided that some of the remote causes, of Fever especially those of the most dangerous and fatal tendency as the Small pox, measles &c. should for the most part, operate only once on the same constitution during life and the same seems to be true in a certain degree of most other fevers, the Plague is said seldom to affect the same person twice, the common people who have had a prevailing fever do not at all hesitate to attend the infected. Sydenham Page 50th further observes, and Van Swieten com. Aph 587 agrees with him, that those who have been once affected with a Quartan Ague, are seldom troubled with it a second time and that when it does happen to seize them, it never continues a great while, many years ago, when a Plague amongst the horned cattle raged with great violence throughout the greatest part of Europe, the dealers would give almost any price for those animals which had undergone the disease experience having taught them that they were afterwards seldom if ever liable to the infection. From thence it appears probable that the action of the remote cause is first exerted on the solid parts of the system, for as our fluids are continually changing, there is reason to suppose that a few years hence, not a particle of those will remain which

now

now distend our vessels and consequently the new particles having undergone no change from the remote cause of fever, would be at this period susceptible of their action and we should be again liable to the disease, --- altho our fluids are evidently affected in the progress of the disease, yet this seems to depend chiefly on the increased action of the solids and frequently to be in proportion to it, for we find in the Small pox that after having introduced a small portion of the Variolous poison into the system provided our patient will abstain from fermented liquors, from Animal food, from increased heat, and in short from all the causes, which tend to increase the force and velocity of the circulation, the disease will glide smoothly on with a moderate and uniform pace, and with little or no disturbance to the patient a very small quantity of the Variolous Virus will be generated and the number of pustules will be very few, but let him drink a single glass of wine, let him approach near a large fire or use violent exercise with in doors, myriads of pustules will presently make their appearance and the Quantity of the Variolous poison, now generated will be prodigious, this digression, seemed, necessary because we entered more immediately upon the inquiry how the remote cause, operates, in bringing about the disease.

In whatever way these remote causes, of fever whether of the exanthematous or continued kind operate on the Systems they are well applied to produce their effects to the system so far as we can perceive in the same or a similar manner (and where ever we can trace the epoch of their application, we constantly find as was formerly observed that some days elapse before the appearance of the disease) a person not having had the disease going into a room where a patient labours under the small pox, in general is not immediately sensible that he has received the slightest injury, yet after some days he will be convinced that he has done so by the appearance of a similar disease, another going near the Bed where a person languishes under a fever, retires without suspecting the least inconvenience, a few days however frequently proves too clearly that he did not visit his friend with impunity. From this general resemblance then between the infecting principles in fevers, as to their mode of application and the nature of their effects, which in the early stages especially are very very much alike, I apprehend it may be allowable, to transfer the Analogy from one to the other, and to reason from the effects of one that is known to similar effects produced by others that are unknown.

I shall therefore select as the most simple and obvious example of the whole, the case of a patient Inoculated for the Small pox. Mast. J. aged 5 of a delicate constitution light hair and of a Floud complexion, having for some days abstained from animal food, on the 5 of March 1750. Introduced a small quantity of the Variolous Acrimony under the scarf skin of the left Arm, four days after the part began to inflame on the sixth he complained of a troublesome itching his Arm became stiff and he complained of a good deal of pain in a regular line directed towards the Axilla, where he also felt a good deal of uneasiness these symptoms continued to encrease untill the Eighth, when he appeared drowsy and averse to motion complained of severe cold, giddiness & of considerable pains in his head and back, on the Even^g of the 10th he had two slight Epileptic fits (epileptic fits have been enumerated by many writers and amongst the rest Sydenham, as a symptom of a mild disease, and if the foregoing reasoning concerning Epilepsy fits be true, there seems to be a foundation for it, the nature of things, for we remarked, that when the remote cause was applied in great quantity or was of a very active nature, the determination to the head was general and

permanent, and gave occasion to a fever of the worst species but when the quantity was small or of a mild nature the determination might be partial and would give occasion to Epilepsy - or a very severe cold fit without much success (heat) On the 11th two or three variolous pustules appeared on his face by the next Morning had increased over the whole body to the number of a hundred, towards the even. of this day the pain of his back, the head ach and other feverish symptoms, began to subside on the Twelfth he seemed quite well in a few days, the pustules all dried off, and he returned to his natural state of health, scarcely at all weakened either by the disease or the remedies employed.

In the case of this Young Gentleman we have a distinct example of fever evidently occasioned by a small quantity of acrimony introduced into the circulation this could not have been applied immediately to the Brain, and its action was probable ~~very~~ different from that of a sedative power, since it evidently passed thro the absorbent system, and in its passage inflamed the next Lymphatic gland between the place of its inversion and the heart we have therefore the most convincing testimony of its entering the circulation, and by the pain it occasioned in its passage of its so far acting as a stimulant power, it was not until the

the eighth day after inoculation (Bloody Urine and a discharge of blood from the Lungs, are usually fatal symptoms, but a convulsive fit, preceding the eruption in children and a sweating coming on in adults, are tokens of the distinct and mild sort Sydenham.) that he began to complain of the symptoms of fever, so considerable an interval, that during it many changes might have taken place in the balance of circulation and when the symptoms did at length come on, they in every respect resembled, those generally attending common fevers, or the accession of an Intermittent. It is extremely wonderfull how so very minute a portion of the variolous poison should be capable, of producing such considerable effects, but it appears very clearly that it possesses the power of increasing the activity of the vessels to which it is applied of inducing a kind of fermentation to a considerable extent round the part, and considerably increasing the quantity of the Virus probably before it begins to be absorbed, *

* I am indebted for this Idea to my ingenious & learned friend Doct^r Falconer of Bath.

Thus we see that the remote cause operates in a general way upon our fluids and probably after wards on our Solids,

But this is not all, for if nothing more than this general stim-
 ulus was necessary to constitute the immediate cause, the fever
 once excited would continue in proportion to its quantity or
 activity as long as the stimulus continued to operate, instead
 of which we find in many instances, the febrile paroxysm occurs
 only at intervals, continuing but a short time and admits of
 considerable & distinct intermission during which the patient
 is sensible of no other deviation from health than an unusual
 aversion to exercise and a general diminution of strength we
 find therefore that the noxious principle may circulate some
 time, with our fluids, without exciting a febrile paroxysm, ^{which}
 does not take place untill some changes have happened in
 the Ballance of circulation, so considerable as to render
 some effort necessary for its removal and this effort, ^{no}Physicians
 have agreed to call fever... Now as the head aches, Stupor
 vertigo delirium and in short all the symptoms attending
 the febrile accession, evidently points out some injury done
 to the organs of sensation and tho' some impediment to the
 proper distribution of the nervous influence it appears high-
 ly probable that these changes, constituting the proximate
 cause of fever chiefly takes place within the cranium and
 probably some what in the following manner.

thus

thus Augmented it is received into the circulation it thence proves a stimulus to our vessels, and more especially to those of the brain, in consequence of which their action is increased, and a greater than their natural, proportion of fluids is induced into them, this determination to the Head continuing to increase as long as the stimulus continues to operate at length, arrives at such a height as materially to interrupt the functions of the brain and the proper distribution of the nervous influence, when this is the case some effort becomes necessary to remove the impediment & -----

& You see very clearly, that it will be here objected that I have made an assumption without proof and it will probably be asked what evidence can be produced of this superior sensibility of the Vessels of the brain. To this I can give no better reply than the fact itself, the Stupor, Vertigo, listlessness and debility evidently show some interruption to the proper distribution of the Nervous energy the head ach and delirium afford a strong presumption that the interrupting cause exists in or near the source of that energy the brain, whilst the throbbing of the Temporal Arteries the occurrence of Epileptic fits and frequently bleedings at the Noses bespeak an increased determination of Blood

to the head, which may be supposed to produce all those effects by compressing the Brain. Besides since the benign author of our existence has so constituted our frame that anything injurious applied to it, shall necessarily excite such motions as tend in their consequences to its own expulsion, is it not natural to suppose that the Brain, the source and main spring of all our actions would be so constructed, as to receive the first impressions of those injuries which its exertions called vis medicatrix are ultimately to remove the vis medicatrix nature.

P. 79 14. 15. W. 7. 16. 17. 18. My only object in this example being to prove that, proper fever, with all its Phenomena, may and does sometimes arise from the action of acrimony introduced into the circulation, I shall not stop here to inquire into the progressive phenomena of small pox but immediately transfer the analogy to explain the Phenomena of Intermitting fevers, which affords us, a better opportunity than any other of tracing with critical exactness the rise, progress and decline of febrile affections, and here I must repeat, that whatever may be the immediate cause of intermittents, we are obliged ultimately in all cases, to have recourse to some, material noxious principle floating in the Atmosphere, or the effluvia arising from

persons affected with them (for agues are beyond all doubt in some cases infectious*)

* These Tertian fevers (says Dr. Sydenham) have as good a right to be called contagious, as the Measles, Smallpox or any other disease; for altho in that season there certainly is a peculiar disposition in the air to affect numbers in the same way, yet those who are much conversant among the sick, are most liable to catch the distemper

as the remote cause in all instances, and as these are applied to our constitution exactly in the same manner, as the effluvia are which produce what is called the natural smallpox, and as we have proved that these effluvia can produce their effects, by being artificially introduced into the circulation in form of variolous acrimony, I am strongly inclined to believe, that the remote cause of intermittents also enters our circulation and exerts its primary effects on the sanguiferous system; and if we attend minutely to circumstances, we shall find that there is always sufficient space allowed for the production of such effects between the time of receiving the infection, and the accession of the first paroxysm. A man employed in emptying a ditch, and exposed for a

considerable time to the miasms arising from the mud, is after some days, affected with an Intermittent Fever but it is not till some days have elapsed that he experiences a first seizure, and the celebrated American - (Franklin) when examining it if any inflammable air was contained, in some of the stagnant waters of this country (which he had found to be the case in some parts of America) did not immediately experience any ill effects from the effluvia, arising from those waters, as might naturally have been expected, had their action been immediately on the nervous system, but (says he) To being sometimes employed in stirring this water I ascribed an intermittent fever which seized me some days after, to my breathing to much of that foul air which I stirred up from the bottom and which I could not avoid, while I stooped down in endeavouring to kindle it." Priestly on Air Vol. 1. Page 323. ---

And indeed facts, of this kind are so numerous & so well known that I introduce them here merely in conformity to my general plan, which in every instance where ever it lies in my power to adduce facts in support of the reasoning employ'd -- I conceive then with the late writers in general that the most common cause of Intermittent Fevers, are the marsh or mud effluvia, that these are received into the circulation (that the remote causes of fever do really enter the circulation and are their increased seems to

to be confirmed by this indisputable fact, that the effluvia arising from the bodies of those persons who labour under some kind of fever, at least are capable of exciting the same disease in other persons exposed to them by the lungs, or some other channel, and they prove a stimulus to our vessels, but more especially to those of the seat and source of sensation the Brain, in consequence of which the action of those vessels is increased, a greater than their natural proportion of blood is induced into them which proportion continuing to increase as long as the stimulus continues to operate, at length arrives at such a height as materially to interrupt the functions of the brain and the due distributions of the nervous influence. In this state to preserve an organ so essential to life some effort becomes necessary to remove the impediment, and this effort beginning with a shivering fit, constitutes what Physicians have agreed to call fever, if the determination is not very general, but confined to a small portion of the Brain only, it seems to act simply as an irritating rather than an interrupting cause, the shivering fit, is generally more violent, the convulsive motions more distinctly resemble those of Epilepsy and they are often succeeded by very little heat, in such cases the shivering or a convulsive struggle, almost seems, to be sufficient to remove so slight an impediment.

In the same manner, that a true epileptic fit, removes the determination, which then takes place, why the senses are not abolished in this case as well as in epilepsy, I do not think myself bound to explain, it may be remarked however, that they are often much impaired, and that slighter fits do sometimes occur in epileptic patients without such abolition, case I. M. instances of which I shall hereafter have occasion to mention. When the determination is pretty general, the shivering is often very slight sometimes almost imperceptible, nature seems conscious of her inability to rout the enemy by one vigorous effort, she therefore goes a more direct way to work, and by means hitherto not well understood excites such motions in the system as tend in their consequences, to increase the action of the heart and Arteries and ultimately by that, means to restore the natural and proper distribution of the fluids, in whatever way these motions are induced, they seem evidently calculated to expell something injurious out of the system, as they universally terminate in a perspiration more or less copious, which combined with other circumstances may be considered as an evidence of the restoration of the ballance of circulation and of the removal for the present of the proximate cause of fever. I say combined with other circumstances, because the appearance of sweat alone is not a proof of the removal of the prox

imate cause, for we see that in many fevers of the worst species and in the worst stages of those fevers, profuse sweats sometimes break out, without any relief to the sick and they may generally be considered as a symptom of great danger, not to mention the Morbus Hungaricus or. *Angehea*

A Fever lately prevailed in this Town and neighbourhood in which cold general clammy sweats, a forlorn ghastly appearance of the countenance and doughy edematous appearance of the skin were amongst the first and most alarming symptoms * -

* Sydenham thus describes the continued fevers of the Years 1673. 74 & 75. Besides the symptoms which all fevers have in common, this fever had the following. A Violent pain in the Back and Head, a stupor and tenive pain in the limbs, joints and whole body, but somewhat milder than in a Rheumatism heat and cold succeeded alternately in the infancy of the disease, and some times also a great tendency to sweat accompanying it, when the fever was suffered to proceed according to its own nature, the Tongue was not dry, and but little altered in its ^{natural} colour only it was whiter, the first was inconsiderable but when the heat was increased beyond the degree common to this fever, the Tongue appeared extremely dry, and of a deep yellow colour, the thirst also was increased,

and the Urine became intensely red, which otherwise retains almost its natural colour &c. Speaking of the cure he says, I have found the above mentioned method of bleeding and injecting Glysters very successful in the cure of this fever; whereas contrarywise (says he) sudorifics not only occasions anomalous symptoms of a bad kind, but likewise rendered the cure uncertain. The capital symptom in this fever the silent delirium, which did not manifest itself so much by talking wildly as by a Stupor resembling a coma which as we said above often happened in this fever, I have sometimes known it come spontaneously, but is generally occasioned by the ill timed officiousness of the nurse, in raising a sweat, wth the morbid matter, (which in this kind of fever does not admit of expulsion by sweat) is put into violent motion, & at length flies up into the head, to the end the patient," Sydenham page 196. — — —

Altho therefore a spasmodic constriction of the extreme vessels, and a dry skin are very general attendants on fevers (Harrison Cullen and Hoffman have maintained) they cannot be considered as the proximate cause since fever may exist without them, but must be considered as a general consequence of that cause, and altho in a secondary way this

constriction may have a considerable share in exciting the action of the heart and arteries, yet, as this ultimately depend upon and seems evidently calculated to remove the Morbid determination to the head, and as whatever will take away that, increased determination will also, infallibly remove the constriction, I think myself warranted to consider this constriction as a Symptom only, and to look upon the increased determination to the head, as the essential cause or causa sine qua non of the disease, &-----

& If I wanted further evidence to prove that such increased determination is the proximate cause of fever, I might have drawn my example from a fracture of the Cranium. In the progress of fevers, and in our attempts to remove them it will never the less be usefull to attend to the degree, extent and permanency of this Symptom because it will often afford us considerable assistance, in ascertaining the extent and of the determination in question, when the sweat breaks out in a regular Intermittent, for the most part all the symptoms as before observed gradually subside, but as it seldom happens that the noxious principle is entirely expelled by a single effort, the quantity which remains again irritates our vessels, the determination to the head after sometime again takes place, and when it arrives at the point of interruption another

effort becomes necessary to remove it, and thus the paroxysms are repeated at merely equal distances of time from each other, untill the offending cause, is intirely removed untill the ~~system~~ system is guarded against its effects, or untill the disease degenerates into a Fever of the continued kind.

The time from the beginning of one paroxysm to the beginning of another is very different in different cases, and hence Agues have been divided into the Quotidian Intermittent, supposed to return every twenty four hours, the tertian every thirty six hours, the Quartan every seventy two hours. &c. In the former part of this essay I have attempted to prove that this division is arbitrary and ill founded, and that Agues return at almost every intermediate number, from eight to thirty six or more hours.

(A difficulty started by Dr. Cleghorn relating to double tertians ^{do} seem to militate a little against the reasoning here advanced, these obstacles I think it necessary to obviate) according to the greater or less sensibility of the system, the quantity or activity of the remote cause, or perhaps more frequently to the operation of all those causes combined (double Tertians &c. I have at this time under my care a patient whose paroxysm returns, three times in twenty four hours. — — — — —)

Double tertians are considered by many writers as a distinct species of Intermittents, from the Quotidian, because they observe a constant alternation of slight fit, on the noon of one day, and a more

more severe one on the evening of the other, and Dr. Cleg Horn in his essay on the diseases of Kinorea, carries this Idea so far as to conclude that each of those fits, has its own proper independent cause; "In double Tertians (says he) the vehement fit, often comes on a little earlier in each period, whilst the slighter fit returns at the same hour, or perhaps later and later, every other day; so that the motions of one have no influence on those of the other; from whence it appears, that each of those fits, hath its own proper independent cause" = page 145.

But let us examine if there be no way of explaining this alternation in a more natural and satisfactory manner than by thus improbably supposing that two distinct essential causes of fever, should operate on the same unfortunate constitution at the same time and that too in so neighbourly and courteous a manner, as not in the least degree to interrupt each other proceedings. It is worthy of remark that altho the two fits differ in violence, yet they return, nearly at an equal distance of time about 30 hours from each other, the fit which occurs at noon, is as before observed always the most violent and seems often to be a little accelerated whilst, the evening accession is as constantly more mild and either keeps steadily to the same hour or is a little retarded. Now if two paroxysms depend upon two distinct and separate causes, how could it happen, that the severe fit should always occur _{about}

about the middle of the day, whilst the mild of it should as constantly take place in the evening which we find to be invariably the case, can it be imagined that the more active cause should be so intelligent as always to select the middle of the day in preference to any other, or is it not more reasonable to suppose, that the same cause, operates in both instances, but receives a different modification from certain external circumstances operating at each period, and so warm a climate as the Island of Minorca, and in the month of July (when this species of Intermittent epidemic there) might not the influence of the sun, by increasing the sensibility or irritability of the system and perhaps, by accelerating the necessary determination to the head, give occasion to the more speedy return of the mid-day Paroxysm, as well as render it more severe, whilst the absence of that influence in the evening might retard the accession and diminish the violence of paroxysm, which occurs at that period, This Idea is rendered the more plausible when we recollect that insolation or exposure to the sun often proves the exciting cause of fever, and that it is a common caution amongst people in the Country not to expose themselves much to the sun lest they catch the ague. - upon the whole then, I am inclined to believe with Dr. Huxham and others, that what has been called the Double Tertian is generally nothing more than a

a 30 hour Intermittent depending upon the same essential cause, but that the effect of that cause is somewhat diversified by the influence of the Sun upon the wanted accession. Upon these principles a similar mode of reasoning all the varieties of Intermittents described by Dr. Cleghorn and others, may be accounted for in a tolerably natural and satisfactory manner. But as this will readily suggest itself to every intelligent reader, I am unwilling to take up any more of his time in explaining those varieties in detail. - - - - -

Intermittents have always a tendency greater or less to become continued fevers, in order to understand how this is brought about, it is necessary to recollect what was formerly said on the distinction between sensibility and irritability, that the former in all probability was much connected with ^{depression} ~~and~~ greatly upon an increased tension of the Arterial System, and gave the moving powers a greater propensity to act from a greater ~~facility~~ ^{irritability} susceptibility of impression. The latter upon a flaccid state of the Arterial System, occasioning a greater facility or rather perhaps affording a slighter resistance in the moving powers, to be acted upon, the former, predisposes the constitution to a more continued, the latter, to an Intermittent Fever, hence we observe that many Intermittents will not bear the Bark, until some evacuations have proceeded, we frequently see" (says Dr. Huxham) that Quins^{is} and double tertians (w.^{ch} by the bye an often times the same thing)

will not bear the Barks, at the beginning till the saline draught^{to}
 proper diluting attenuants and in some cases Bleed. & purging
 and Vomiting have been made use off¹ essay on Fevers P. 23.

And hence perhaps the reason, why in the plague of 1666. the most
 fat and plump, became the most speedy victims of the contagion.

It was very rare to see any of the diseased, of this second class escape
 tho' they supported themselves a little longer than the preceding
 they perished almost all, with the mark of a gangrened inflammat^{ion}
 especially in the Brain and Thorax. and that which was most
 singular, was that, the strongest, fatter, fuller and most vigorous
 they were, the less they had to hope, Quincy on pestilential dis^e P. 36.

The plethoric state of the system giving a greater degree of intensi^{ty}
 to the disease. I do not know whether I am perfectly understood,
 and feeling a difficulty to express myself to my own satisfaction
 I must beg the indulgence of my reader a little longer, that I may
 explain my self more clearly choosing to be thought prolix than
 to run the risk of being misunderstood.

When the remote Cause of fever are admitted into a plethoric
 habit, there are two causes, which would render its operation
 more speedy and more continued, in the first place from
 the increased susceptibility of impression (arising from tension)
 wh^o as causes may produce considerable effects, secondly
 the vessels being already in a general state of distension,
 a very

a very slightly increased determination to the head, will prove sufficient, to interrupt, the functions of the Brain, at the same time for a want of room in the vascular system at large, the determination will with difficulty be removed, and when removed will from the causes above mentioned readily recur, the fever will in this case approach more nearly to a continued form. On the contrary when the remote causes of fever are admitted into a habit, somewhat exhausted their operation will from several causes be slow from this diminished susceptibility of impression, the stimulus will operate with less force from the empty state of the vessels, its operation must be continued for some time before such a determination could take place as would materially interrupt the functions of the Brain, and the interruption would be more distinct and complete if the vigor of the system be not materially diminished because there would be sufficient room in vascular system, to admit, the congestion within the head to be completely and easily removed by moderate efforts, since there would be less resistance made to those efforts, and this I take to be the reason why imperfect Intermittents are rendered more distinct and perfect Intermittents, apparently more violent by bleeding, purging abstinence and all those causes which diminish the fullness of the vessels. 2

2 but altho a moderate diminution of plethora, tends evidently to increase the tone and vigor of the system, yet fatal experience has shewn that the depletion must not be carried so far the powers of life so materially depend on a due quantity of blood circulating in our vessels, that the profuse loss of it never fails greatly to weaken the constitution, and to render it incapable of exerting those efforts, which are necessary to remove any ~~no~~ morbid principle applied to it, and hence persons so exhausted are in the utmost danger when attacked by the remote causes of fever, of which the following example, M^{rs} W. aged 38 of a fair skin brown hair and florid complexion was brought to Bed on Mar^{ch} 12th 1782 the Breech presenting she had a laborious birth, which was succeeded by a very considerable Hemorrhage to which she had in former labours been accustomed, the placenta was extracted with all prudent expedition, after which the Hemorrhage gradually subsided, altho much lowered by the discharge, she was tolerably well the next day, and in little more than a week, she was able to sit up some hours every day, on the 26th at 12 at Night, I was desired to see her, being informed she was taken suddenly speechless, she had at the instant of seizure, discharged a very loose and foetid stool in this state I found her, with the addition of insensibility to light, however she seemed in other respects in some degree sensible and when desired made an effort to put out her tongue

which she could do but a very little way it appeared at present moist, and but little discoloured, altho by the morning it, and the whole mouth and lips, were covered with that dark kind of mucus which occurs in putrid fever, as a fever of this kind, with a very fatal tendency then prevailed almost universally in the village. I had no hesitation in considering this as a most alarming attack, of that fever, I therefore applied a large blister to the head and directed that two spoonfuls of a strong decoction of Bark and snake root, and the same quantity of port wine should be given alternately every hour, this was complied wth, had several loose stools in the night, she seemed a little more sensible the next morning, but remained speechless in the evening of this day she died. I mention this case as one example of the dangerous effects of violent Hemorrhage as a predisposing cause.

Sometimes the remote cause appears so very active as in all constitutions to produce a fever, of the continued kind in such cases I apprehend the stimulus applied is so powerfull as to maintain a continued determination to the Head, in opposition to all the efforts which nature can make for its removal.

But those efforts are nevertheless made and probably constitute the exacerbations and remissions in the more continued fevers and on which Dr. Cullen founds his Idea of the diurnal revolution of the system.

of this nature is probably the virus of the plague, of the small
 pox and of the more malignant fevers which occur in this coun-
 try, but be this as it may it is very certain that imperfect
 Intermittents are very much disposed to run into the most
 alarming continued fevers, and this probably happen in the
 following manner, From a want of due power in the system,
 and a greater resistance to its efforts by a plethoric state of
 the vessels the morbid congestion is never completely removed
 from the frequently repeated distension the vessels of y^e Brain
 become weaker, and weaker at each returning paroxysm in
 consequence of which the remaining congestion becomes
 greater and greater, the intervals therefore are rendered shorter
 and shorter; untill at length the return becomes so frequent,
 as not to be distinctly marked, and thus constitutes what is
 called a continued fever, I have thus far assumed from
 analogy and the reason of things rather than proved that an
 increased determination to the head is the proximate cause
 of fevers, but it is not on analogy alone that I rest, y^e proofs
 of the reasoning employed, for facts of the most striking and
 conclusive nature, strongly countenance the opinions
 advanced, Hemorrhages from the nose are often observed to take
 place in intermittents, and when they run to any extent, (and
 are not as if too often the case) Injudiciously checked seldom
 fail to put a stop to the disease as happened in the following
 instances

instances, some Physicians of my acquaintance to whose abilities, I pay great difference, object to this Idea, and would maintain that, the Intermittent fever, and Typhus, are really, distinct genera, proceeding from different essential causes but I do not see that I ought to admit this objection, as of any weight untill they have proved that, the revolutions, of a proper intermittent, have continued through the progress of a proper Typhus.

In fatal fevers of the continued kind, Dissections have too clearly pointed out the effects of such determination in so much that out of eight dissections related by Sir J^m Kingle no less than 4 discovered abscesses in the Brain, and in most of them inflammation were distinctly to be traced, but as his observations on this subject, are of no great length, I shall take the liberty of transcribing the whole.

* It will be observed perhaps that D. Cloghorn, in his dissections of those who died of the tertian fever at Minorca did not discover any material injury of the brain and therefore, altho abscesses of the brain may frequently be the consequence of continued fevers, yet it does not from thence appear that an increased determination to the head, is the cause of Intermittents but it must be remembered that the very term Intermittent implies that the proximate cause of fever did not exist, a sufficient time to give an opportunity for suppuration to take place.

The bodies opened of those who died of the common Hospital
 Fever (says he) were in all ten; in some of them all the cavities
 were opened; in others the Brain alone was examined or the bowels;
 These imperfections of this part I thought proper to mention,
 that the accounts here given, might not be considered as com-
 -pleat, or prevent others from pursuing the inquiry farther.
 The most unexpected appearances were abscesses of the Brain
 of which therefore I shall ~~take~~ ^{take} more particular notice. The first
 I saw of this kind was at Ghent, but the man being brought into
 the hospital from the Barracks no earlier than two day before
 he died, I could only conjecture from the symptoms, and the
 imperfect account I had of him, that his death was owing to a
 fever of this kind; after lingering near a month in it, I found
 a bout 3ij of purulent matter in the ventricles of his Brain;
 and observed that the whole cortical and medullary substance,
 was uncommonly flaccid and tender; nay some of the same kind
 of matter, was found, in the substance of the upper part of the
 Cerebellum; yet this person with some stupor and deafness,
 had his senses till the night before he died, so far at least;
 that he answered distinctly when roused and spoken too;
 but about that time the muscles of his face began to be
 convulsed; Of two other instances of men who undoubtedly died
 of this fever, in one the Cerebrum was suppurated; in the other
 the Cerebellum, in the former case the patient was under
 a

a Stupor with diarrhoea from the beginning but was never delirious nor altogether insensible, his pulse sunk early, and about ten days before he died his head began to swell, and continued very large till within two days of his death when it began to subside a little, for several days before his end he would taste nothing but cold water, and during his illness he lay constantly on his right side. The head being opened, an abscess as large as a swan's egg was found in the substance of the fore part of the right hemisphere of the brain, full of thin matter like whey. At that time five more, ill of the same fever, had the like swelling of their heads but recovered, this extraordinary symptom I never observed before nor since;

In the other case the abscess in the Cerebellum, was about the size of a small pigeon's egg, and contained also a thin kind of ichorous matter, nor had this patient been ever so thoroughly insensible as not to answer reasonably when spoken to. Two days before he died, his urine turned pale. Both these bodies were opened by M. Breach Apothecary in Southwark, then a mate in the hospital, but suppurations in the brain were not constant; for another who died about the same time, with the like symptoms, the pale water excepted, had no abscess either in the Brain or Cerebellum, and two were opened afterwards, in which the cortical substance of the brain had an inflammatory appearance but no suppurations. In one of them the large intes-

lines were corrupted; that man went of in a loose neck; and just before his death, he had a discharge of Ichorous matter from his nose. In the military hospital at Ipswich one who unexpectedly died of this fever, after having been once in a fair way had no suppuration in his Brain, and about that time Dr. Elghorn informed me, that he had seen the head of another opened; who died after an abscess in each of the orbits; that he had found the brain flaccid, and about 3½ of thin serum in the ventricles; but that neither of these two bodies had been farther inspected."

Pringles diseases of the Army p. 330 at sequent

Huxham says, "I scarce knew a symptom more fatal in the small pox, than a cold shivering fit happening, at the state of the disease, a symptom indeed in the small pox, at that time of it always to be dreaded."

Huxham on small pox. p. 1729

An affection which the patient always describes as a coldness and shivering almost always attends the formation of Pus, and I am inclined to believe that the shivering here mentioned was a symptom of suppuration. Having experienced considerable collections of matter myself I am perhaps able to describe it a little better, than has been commonly done it is always attended with a general chillness like that arising from going directly out

out of a warm room into the cold air, and this is accompanied with a kind of thrilling or tremulous motion; thro' the whole body, more nearly resembling the vibration of an elastic spring or the sensation produced by a coach going over one end of an elastic plain, on the other end of which we stand, than any thing else with which I am acquainted.

To sum up the whole if we allow the most general immediate cause of Epilepsy to be an increased determination to the head, if we recollect that Epileptic fits, occur frequently in the accession of fevers, if we admit that febrile and Epileptic paroxysms may be converted into each other: *

* The Tertians began in July and finished their annual career about the end of Nov: many persons died suddenly during the dog days and about the Equinox. *Eligform diseases of Menarche P. 173*

If we attend to the interruption of sensation and thought, the frequent occurrence of coma, apoplexy and Palsy, the working felt within the cranium, during the cold stage, the particular throbbing of the temporal arteries during the hot stage of fever, the frequently salutary bleedings at the nose and the suppurated appearance of the brain after death, I say if we attend to all these things, it appears to me the highest degree of scepticism, not to admit, that such a determination does take place in all fevers, and that it probably constitutes their immediate cause.

I shall now conclude these observations by the relation of a singular case of periodical epilepsy which more clearly proves the Analogy between the two diseases than the most elaborate reasonings I could advance.

J^r. Palmer aged 10 years, was on March 1. 1782st seized with an Ague which returned every 24 hours, untill the 2nd, when he was affected at the febrile period with violent epileptic fits, the most distinctly marked of any I have ever seen, at first he experiences the same degree of cold as if the Ague was coming on, presently after he feels, a violent pain in both feet as if they would drop off, this pain and this sensation gradually ascend to the head when he is immediately seized with the convulsive motions these continue for the space of two or three minutes during w^{ch} time he is totally senseless, his head his legs and arms are violently agitated, towards the end his face is much elongated & distorted, his mouth stretched wide open, his eyes drawn upwards, so that none but the white appears, and now the whole, goes off with a deep sigh at the distance of 5, ten or 15 minutes, the same process is repeated, and thus the Paroxysm continues for the space of two or three hours, it then goes off, intirely, leaves no fever behind it, and does not return untill the accustomed period. At the age of six he had the small pox which was ushered in by an Epileptic fit, he had another at the ~~return~~ off^g of the disease but untill the present time has since felt nothing

of them, upon a large Blister being applied to the head he escaped the fit for one Day, and being with him a few minutes before one of the seizures, when his pulse were rather hard and 104, after he had undergone three of the above convulsive struggles, I bled him to the quantity of 3vj, upon which that day's fit went off entirely having lasted about 25 minutes. I considered this case as the most striking instance, I have ever seen of the resemblance, between the immediate cause of epilepsy and that of fever, for in fact they appear to be the very same disease, different modifications, at the same time (if our former reasoning be admitted) that it throws great light, on those cases, of epilepsy which begin in the lower extremities, seem to have their cause there and ascend to the head as has been commonly expressed, with the sense of a blast, To discover as far as was in my power, whether this was really the case in the present instance, I intended to try the effect of ligature, and therefore directed that his garter should be tied tight over both knees, as soon as the paroxysm began to approach, but this experiment was prevented by the Bark, which was given in the intervals to prevent a return of his complaint.

And in order to discover if possible the comparative efficacy of blisters, applied to the Ancles, I upon another occasion directed one on each leg about two hours before the expected seizure, and in a few days was completely overcome by the Bark &

45

The reader is particularly directed to pay attention, to this case as considerable steps, will be laid upon it when we come to treat of the Theory of Cure. Let us now proceed to offer a few observations on apoplexy and palsy.

Apoplexy

As I am addressing myself to Persons acquainted with the history of diseases in general, I conceive that the term Apoplexy is already understood, that it is employed to denominate, a disease in which all sense, and voluntary motion is suddenly suspended, the breathing is laborious, protracted, and snoring, the patient seemingly in a profound sleep from which no stimulus can rouse him; whilst the pulse continues natural, or are stronger than before.

The causes have been divided by authors into the predisponent, the occasional or exciting, and the immediate,

The predisponent causes are said to be a plethoric state of the system, an Anasarcaous or Leucophlegmatic habit, and a peculiar conformation of the body (viz) a large head, a short

short Neck, and great corpulency, Apoplexies do however sometimes occur in persons of a very different structure.

The occasional or exciting causes, generally, enumerated, are violent exercise, immoderate passions, Intoxication or any cause, which can increase, the determination of Blood to the Head or interrupt its return from thence to the Heart. * - -

* The most frequent immediate causes that produce, Apoplexy, are either extravasation of blood from ruptured vessels, within the cranium or an accumulation of Lymph or Serum within the Ventricle of the Brain. I am convinced that out of a hundred Apoplexies that happen ninety nine are brought on by either one or other of these causes, and therefore the indication of cure, are chiefly to be levelled against them; this being a disease in which the true Aetiology, is so hard to come at, especially when we have had no opportunities of knowing any thing very particular, with respect to the case before us which may not seldom happen, these indications are to bring about a reabsorption of the effused fluids, which is most effectually done by plentiful blood letting, hydragogue purges, Diuretics, and strong Blistering.
 Fleming's Physiology Lect 13 Page 174.

The immediate cause is almost universally represented to be an extravasation of blood or of serum, within the cavity of the cranium, according to which I draw apoplexies have been

divided into two kinds, the serous and the sanguineous apoplexy. It is not my intention to dispute the agency of either of those causes, as I am persuaded both from reasoning, from experience and from dissection that all have at times their share in producing the disease, all that I shall attempt to maintain in the following paper is that they probably do not operate so frequently as has been imagined, that extravasation, is probably more frequently the effect, than the original cause and that there are other more frequent causes, both remote and proximate of Apoplectic seizures, than have been generally taken notice of. I am more readily disposed to pursue this Idea, because it leads us to some hopes of removing the disease when present, for if we confine our Idea of the proximate cause of Apoplexy to extravasation alone, I believe there are few reasonable Physicians, who know any thing of practice and have considered attentively what little we know of the functions of the Brain, that would upon this principle entertain very sanguine hopes of their patients recovery.

⊙ Because admitting that there are absorbents in the brain which would if undisturbed take up the extravasated fluid there, still exists so general, and considerable a degree of torpor in every function, that I should conceive it very unlikely

to be effected unless that oppression could be first removed, besides that perfect Apoplexies do happen without extravasation and are removed in a very short time by the invention of the Via Mediatrica Naturae is too evident from the Apoplectic state of Intents ^{emphatic} & exemplified in y^e case of M^r H. yet perfect recoveries from Apoplectic seizures, do sometimes happen, and their resolution, into palsy of long continuance, is by no means unrequent, this could scarcely take place as I imagine in cases of real extravasation without the operation of the Trepan &c.

* The same external injuries (contusion of the Cranium) may extend their effects farther. the vessels connecting the dura Mater, to the Cranium, may be ruptured, causing a separation of those parts, whence extravasation of blood inflammation, suppuration, and ulceration, upon that membrane may issue, under which circumstances nothing but Trepanning can bring relief. Gooch's Surg.^y Vol. 1. P. 264.

The causes above mentioned likewise do indeed explain very well, the manner in which Apoplexies from vigorous exertion either of body or mind, may be brought about but in this way they are always to be considered as sporadic diseases, and we can see no reason (upon this principle) except

perhaps excessive heat of the weather, why they should occur, in a greater number of instances, at one particular season than at another, nor does this reasoning, well explain, how Apoplexies take place in sober persons, and moderate in their manner of life, when disengaged from any violent exertion of the body, untroubled by any great perturbation of Mind, yet this disease does frequently happen to such persons, under such circumstances without any previous notice, often in Bed and at perfect rest, and I have constantly remarked, that when I have been called to one Apoplectic patient, I was almost certain to be desired to see several others, in a short space of time, so that Apoplexies have often seemed to me to be in a certain degree Epidemic; nor am I singular in this opinion for in a small pamphlet by Nicholas Robinson M.D. member of the College of Physicians of London, published in 1732 intitled a discourse upon the nature and cause of sudden deaths; I find the following Article; "Sudden Deaths, were so generally Epidemical in the years 1730 & 1731 that who ever reviews the yearly Bill for those two years; and compares them with the yearly Bills for 20 years backward, will perceive that there is no season, tho' ever so sickly in which the Article of sudden Death and Apoplexy, was never so numerous as during that period of time and indeed if we attend to the most accurate writers,

me

we shall find Apoplexies occurring in groups and seldom mentioned as a sporadic disease amongst these Doct.
 Flusham abounds with examples of this kind.

I could not help attributing this frequency at particular periods within my own mind, to some hidden general cause floating in the Atmosphere altho, I could not form any Idea of what that cause was, I therefore noted the situation of my patients, their structure, their peculiar mode of life the diseases to which their progenitors, and connections had been liable and the diseases which prevailed at the time; but I could gain nothing from my inquiries except this, that (so far as I can recollect) in every instance Fevers of one kind or other, did then or had lately prevailed, in the same house or at least in the same Village, but still I was as much at a loss as ever, to account for the remote cause, altho I could not help suspecting that it was somehow or other connected with the remote cause of fever, and since the foregoing reasoning on epilepsy and on Fever suggested it self to me, this Idea has gained farther strength upon my mind so that I am now, very much inclined to suspect, that altho some few cases of sporadic or accidental Apoplexy may as before observed possibly take place, yet that this disease in a general way depends for its remote and occasional cause, on the same principle w^{ch} constituted

the essential cause of Fever, and in this opinion, I am
 still more confirmed by observing that, the most faith-
 =full Medical historians, Sydenham, Fluxham, Van Swieten
 Hodges on the Plague Quincey &c have constantly remarked,
 that, many people die suddenly during the general preval-
 =ence of most epidemics, that an apoplectic state often accom-
 =panies the cold stage of Intermitents, that as long ago as
 the days of Hippocrates a fever succeeding Apoplexy was con-
 =sidered as a favourable symptom, and more especially also
 by the occurrence of the following, and many similar cases
 which may serve as an example, of the intimate connections
 which frequently subsists between the two diseases and to prove
 as far as medical reasoning will generally admit of proof
 that Fever and Apoplexy in many instances at least, differ
 in degree and permanency rather than in kind as to the
 nature of their proximate cause, This connection has been
 constantly remarked. Dissections too have favoured too
 much this mistake for Apoplexies, seem seldom to prove
 fatal until one extravasation has taken place, and Ana-
 =tomical Pathologists seem not always to have kept sufficient-
 =ly in mind that they were examining the dead not the
 living Body, and that the appearances might possibly be
 the effect, not the original cause of the affection, they seem not
 always to have recollected that these cases experience had
 proved

proved to be in their nature fatal and that the subject
the assistance of the sexton not the
Physician.)

By Physicians altho no practical use seems to have been
made, of the observation, for Apoplexy and fever, appear still
to be considered as perfectly distinct diseases, and are placed
by the best modern nosologist in different classes yet I am
firmly persuaded from what was said before that all the
difference which takes place between them, frequently con=
=sists in this, that when the efforts of the Vitæ Medicatrix nature,
are sufficient to raise a fever, in the Apoplectic state of
Intermittents the disease, as in the case of Mr. Hardwick, still
retains the name of an Ague or Intermittent fever; but
when those efforts, are not equal to the accomplishment
of this purpose, the complaint then acquires the name
of Apoplexy and Physicians seem to have sat down contented
under the Idea that Apoplexy is Apoplexy rather than to
seek for any difference (except in their division into venous
and sang^o.) There might be either in their remote or proximate
causes. From these considerations I say I am induced to
believe that the proximate cause of Apoplexy is generally
the same with the proximate cause of Fever, a morbid in=
=creased determination to the head, occasioning an

impediment to the proper distribution of the nervous
 influence only that in Apoplexy the impediment is more
 universal and considerable than it is in a fever, and from
 some cause or causes not at present well understood, nat-
 =ure is incapable of exciting such motions in the system,
 as are necessary to remove the offending cause, or in oth-
 =er words, she seems to be so overpowered by universality
 of the oppressing cause that she cannot excite, that reaction
 of the system which constitutes what is called fever, but
 often in the struggles which she makes a rupture of the
 arteries probably takes place and thus the Apoplexy proves
 fatal. This inability however admits of different degrees of
 duration, according to which the Apoplexy is more or less
 permanent, thus in some instances it continues, only
 during the cold fit, as in the case above related, in others
 it continues, some days, when a fever succeeds and then agree-
 =able to the Aphorism of Hippocrates the patient frequently
 recovers, in other instances, it continues somewhat longer
 but then very speedily and inevitably proves fatal or degener-
 =ates into a chronic affection of one side, called a Hemiplegy or
 Palsy under which the patient having recovered more or less
 the use of the other side, does in some instances drag, on a
 miserable existence for a considerable length of time but
 very

very rarely indeed recovers his former intellectual or bodily health; It ought to be remarked, in this place, that some appearance of Fever, almost (I believe I might say) always accompanies every case of Apoplexy and Palsy. when this Idea of Apoplexy and Palsy first occurred to me there appeared at first eight, two objections, which seemed then insuperable, The first was how so considerable an impediment to the proper distribution of the nervous influence could exist, for so great a length of time, as we observe Palsies to continue without proving fatal. The second, seeing that the causes of fever still continue to exist within the constitution how could it happen, that a farther and fatal accumulation, does not take place, these difficulties however seemed upon reflection to admit of a tolerably satisfactory solution. We have hinted before that Apoplexy seems to differ from Palsy chiefly in this, that in Apoplexy the whole brain is affected; in Palsy only one part of it, and that an Apoplexy continuing for any length of time must inevitably prove fatal. Now to obviate as far as possible such a catastrophe nature seems kindly to have provided, that the seat and source of all our sensations and actions (the Brain) *

* Since therefore, this organ of sense and motion is double one part or side may remain entire while the opposite

is no longer affected by any corporeal object, an evidently
 appears in an Hemiplegia in which disease one half of the
 body is so relaxed or paralytic that no motion remains
 in it capable of being performed by the influence of the
 mind; and yet that ~~conscious~~ conscious faculty remains
 which perceives and wills the motion and tho' the person
 thus affected endeavours with all his might to move
 the paralytic side, yet no motion at all follows in the
 muscles, nay farther in the worst species of the same
 disorder, the whole side affected is likewise destitute
 of all motion. Van. Swieten. Comment. on B. Aphor. 276

The Brain should consist of two, distinct, and complex parts,
 each part extending its influence to the organs more im-
 mediately essential to life, the heart, Arteries, Lungs & intestines,
 whilst the influence of one part only should be communicated
 to the organs, of voluntary motion, by which contrivance the vital
 organs, continue their functions, notwithstanding there may
 be almost a total impediment to the proper action of one part
 of the Brain, but sensation and motion in the voluntary organs
 (these not being immediately essential to life) continue on
 that side of the body only, whose corresponding part of the brain
 remains uninterrupted hence when such a general interrupting
 accumulation takes place as must do, to occasion Apoplexy, the

The first efforts of nature seems to be to remove the impediment
 by exciting a fever, but being unable to accomplish this desirable
 purpose, she avails one other resource and that is to attempt to
 to throw the whole impediment on one part of the brain, and
 in this in this she frequently succeeds, by which means life
 indeed for a time is preserved but at the expence of one half of our
 body, and perhaps an equal proportion of our natural faculties
 likewise, or rather perhaps if the Idea of the distinct and compleat
 nature of each hemisphere of the brain, be true the accumul=
 =ation may either not be so on one hemisphere, as on the other,
 or perhaps from some cause we cannot yet properly ascertain
 one of them may be enabled to make such exertions as are
 sufficient to overcome the impediment, and thereby to recover
 its proper functions. And this affords additional argument,
 to prove that those Apoplexies at, least which immediately re=
 =solve into palsy and those more especially which speedily term=
 =inate in health, do not depend upon effusion for their prox=
 =imate cause, for since all the ventricles of the brain, commu=
 =nicate with each other any fluid especially those of the pituita=
 =ous and uncoagulating kind effused internally would in all
 probability operate sometimes on one side of the brain, some=
 =times on the other, according as the patient, happened to be

laid either on his right or on his left side, and the paralysis
 would sometimes affect one side of the body sometimes the other
 according as the pressure was exerted on the corresponding side of
 the Brain. If the fluid was extravasated externally to the dura
 mater, between the dura and pia mater, or between the pia mater
 and the Brain, in sufficient quantity and so generally extended
 as in the first instance (which commonly happens) to occasion Ap-
 =oplexy how could it possibly be taken up so suddenly and so com-
 =pletely on one side of the brain as immediately to convert the disor-
 =der into what it very frequently is converted a state of palsy
 farther arguments, in support of this opinion might be drawn
 where the necessary, from the slow and gradual progress of Hydro-
 =cephalus Internus, from the great quantity of fluid accumulated
 before any considerable effects are produced from the universality
 of those effects when they do appear, and from the general and
 fatal tendency of that affection. The reason why the accum-
 ulation is not renewed I imagine to be the following; when
 speaking of the action of the remote cause of fever in inducing
 the proximate cause. I observed, / and thus the paroxysms
 are repeated at nearly equal distances of time from each other
 untill the offending cause is intirely removed untill the
system is guarded against its effects or untill the disease
 degenerates

degenerates into a fever of the continued form) and we shall hereafter in the practical part have occasion to observe, that we have it not generally in our power, immediately to expell y^e offending cause, it our duty in the cure of fevers to guard y^e system against its effects, Now what we should attempt to do in fever by Medicines, Nature seems to accomplish in Apoplexy or palsy of her own accord, for altho' the immediate & proprius cause appears, to be removed from one part of the brain, yet, sensibility of whole system seems to be diminished in so considerable a degree as to render it insusceptible of those impressions from the stimulus of the remote cause, which are necessary to induce the morbid determination and therefore no fresh accumulation takes place. In this manner I conceived those difficulties to be in a certain degree overcome but after all candour obliges me to confess that all the reasoning upon this obscure subject and more especially the latter part of it is to be considered as purely Hypothetical, yet it seems to me notwithstanding to carry with it a species of Interval, evidence not easily to be controverted or rejected it receives such support from the reasoning advanced on Epilepsy and on fever, and in return reflects so much light on the Theory of those diseases, that I consider,

the whole chain of reasoning on Epilepsy, or fever, on Apoplexy
 and on palsy, as so many pleasing illustrations of each other
 they depend for their fallacy or truth, upon the same general
 principle, and I believe they will stand or fall together. it
 was my original intention to proceed immediately to offer, my
 observations on the cure of the above mentioned diseases, as
 connected with experience, and the reasonings advanced, in hopes
 to deduce from them methods of cure not altogether new, but
 less complicated and more energetic than those commonly em-
 ployed; but recollecting that practical observations coming
 from a young and obscure practitioner, supporting and suppor-
 ted by an hypothesis which has for its object a kind of revolution
 in medical reasoning, might appear incompatible with that
 modesty which ought ever to accompany a love of science, and
 with that respectful deference, which is ever due to superior
 abilities, and to greater experience, I shall for the present take
 leave of my reader, promising if health permits, to resume my
 pen as soon as the candid criticisms of ingenious men shall
 enable me to correct those errors into which, in an enquiry
 of this intricate nature, I must unavoidably have fallen; or
 until their silent approbation shall enable me to proceed
 with proper delicacy, and a prospect of success, in the interim
 adopting

adopting most feelingly the sentiments of Jully:

*Homines ad deos nulla re propius accedunt quam salutem
hominibus dando.*

N. B. I could have adduced many other arguments drawn from facts, recorded by numerous respectable writers, in support of the reasonings advanced; but as I have not the most distant wish to erect any hypothesis which has not its foundation on the solid basis of incontrovertible facts, I chose to rest my arguments chiefly on cases which came under my own observation in the course of seven years experience, and which therefore I apprehend are not unfrequent in practice.

* This experience, I must confess, was very extensive; so much, as to see the foundation of a constitution not formed by nature upon her most robust plan.

Long after the preceding sketches were in their present form all the alteration they have undergone since the year 1780 is the change of a few cases for others which occurred afterwards, and which seemed more strictly in point. Dr. Jones's enquiry into the state of medicine made its appearance, exhibiting a seemingly imperfect sketch of a system of medical reasoning adopted and supported at Edinburgh by Dr. Brown, in which

some opinions are maintained, respecting the theory of Fever,
 which militate with the opinion I have advanced, and render
 it necessary that I should endeavour to remove the objections, but
 it should be imagined by the followers of the new doctrine, if
 it is invulnerable. but that what I shall advance may be clearly
 understood, it will be necessary to take a concise view of Doct.
 Brown's general principles. So far as I can understand from
 the work before me, Dr. Brown considers the animal as a sensitive,
 but not as a perfect Automaton, or self acting machine; that
 it is capable of being acted upon by various stimuli, but
 without their application would forever remain inactive;
 in other words, take away every stimulus and life or at least
 all action, would immediately or soon cease. This property
 of the animal body he calls its excitability, and he estimates
 the degree of excitability by the quantity of effect produced by a
 given stimulus. A tooth coming thro' the gum, for example,
 will even in a grown person occasion a good deal of pain,
 but in the tender infant the same stimuli will excite violent
 convulsions: Excitability is greater therefore in the infantile
 state, than it is in the adult state, — upon this Idea Dr. Brown
 directs a whole system of medical reasoning, in pursuing ^{which}
 which he comprehends all diseases under two classes only, viz,
 those

those which depend upon too great, and those which depend
 upon too small a degree of excitability:— the former he calls phre-
 =gistic, the latter the asthenic class of diseases consonant to this
 idea also he reduces all the indications of cure to two simple
 propositions. First, to increase excitability where defective
 Secondly, to diminish excitability where it prevails to excess
 The first indication is sometimes to be fulfilled by the exhibition
 of what he calls the more quickly diffusible, sometimes by the
 more permanent stimuli, and sometimes by the conjunction
 of both, according to the degree or permanence of the torpor ex-
 =isting at the time. The second, sometimes by the negation
 of particular stimuli; and at others by the negation as far as
 possible of all stimuli whatever; for according to the above
 idea of the natural inactivity of the animal machine,
 Dr. Brown deduces as a necessary consequence, that all sub-
 =stances capable of producing any effect upon that machine
 stimulate;— or in other words, that all medicines whatever
 must be considered as stimulants. I should be sorry to have
 misconceived, and still more to have misrepresented, Dr
 Brown's opinion; but as far as I can judge from this incoherent
 publication of Dr. Jones's, or from Dr. Brown's Elements, I believe
 the foregoing to be a fair general view of his hypothesis.

I shall now proceed to make a few concise observations upon the whole. With regard to the first Idea, that the animal body is not a self acting machine, I apprehend that it is an opinion in the university of Edinburgh neither new nor peculiar to Dr. Brown - if I mistake not the venerable and ingenious & long ago delivered an opinion "That could we remove all stimuli - as light, sound, heat &c (I speak from recollection) all action, and perhaps life itself, would immediately, or soon cease. As to the opinion that all the substances of the Materia Medica stimulate, I believe it has never in reality been disputed by any one; that is, that they produce their effects by some positive operation on the system: and what is a positive operation, when applied in a physiological or therapeutical sense, but a stimulus. Opium, for example, in a proper dose, generally induces sleep, and cures pain; it has therefore been called, and seemingly not improperly, a sedative or quieting remedy; yet no reasonable physician I believe ever doubted that this was the ultimate effect of a peculiar stimulus originally exerted on the stomach, although it has been found convenient, for the sake of distinction, to divide remedies into different classes, and to call some stimulant, others sedative &c, according as they ultimately either increase or diminish the apparent activity of

of the nervous or vascular system. Ipecacuanha, emetic tartar, and some other substances, in a sufficient quantity, occasion sickness, nausea and debility, and therefore may be called nauseating and debilitating poisons; but no one questions that these are the ultimate effects of an original stimulus first exerted on the stomach. In order to distinguish these substances from each other, we must upon the Brunonian principles, call them debilitating stimulants, sedative stimulants, tonic stimulants &c. which seem to be a clearly discriminated by the more concise terms already employed. With respect to the last opinion, that all diseases may be usefully comprehended under two classes: the various phlogistic and asthenic modifications of the same disease (to use D^r Brown's own terms) in the same person, in its different stages, render it too general by far for practical purposes. Nosological arrangement, altho greatly improved by the systematic genius of Cullen, is not yet perhaps arrived at all the perfection of which it is susceptible - but as this is a discussion foreign to my present purpose, I shall conclude with a few observations on that part of D^r Jones's Work, which is more immediately connected with my present subject: - I mean, the Brunonian Theory of Intermittents.

But the hot fit, (says he) which is a distinguishing part
 in their course, has never been looked upon as depending
 upon debility. Its resemblance to the state of the body taking
 place in that form of phlogistic disease, has been the circum-
 =stance, which chiefly misled physicians; they (poor mortals)
 "have at no time possessed so much philosophical turn, as to
 have been in any condition to discern false appearances from
 real states: on the contrary, their propensity to mark so
 many real differences of morbid state, as their histories
 furnished of apparent ones, has been the chief cause of the
 immense volumes of diagnostics, and of late, of all the nos-
 =logical distinctions, which have distorted the pathology,
 and perverted the practice of Physic, a glaring example
 of which we have in the present case: but we assert that the
 hot fit in intermittents, is the same in kind with the cold
 one differing only in this, that the debility which is their com-
 =mon cause undergoes some diminution in the hot fit,
 while at the same time it is still debility -- the proof of this is
 incontrovertable: a state of debility constitutes the cold fit, which
 we are warranted to conclude from the whole concurrence of
 symptoms, as well as from the known debilitating effects of the
 several exciting powers, these are the debilitating or sedative
 stimuli

stimuli applied; "communicating (in the Baunonian lan-
 -guage) a deficient stimulus," in like manner, when a
 surgeon amputates above the elbow, he operates by commun-
 icating to the patient the deficiency of an Arm ^{P. 70} *vid. Jones*. Inquiring
 the consideration of which, as our look is swelling in our hands
 we must dispense with here, referring our reader to the new
 doctrine where this fact is proved. Another argument for
 the hot fit depending on debility, is its being preceded by the
 cold one, for if the cold fit, as has been proved, depends upon
 debility, it is inconsistent with the nature of things that its
 effect will be increased action or excessive rigour, a state dia-
 -metrically opposite to that which the cause is suited to pro-
 duce. How are we to reconcile this with *L. Jones's* observation
 that the debility undergoes some diminution in the hot fit,
 how is this increase of strength brought about! according to
 his principles, the debility should be increased in this stage.
 Physicians have had recourse here to their paradoxical notion,
 that the living system has a power, when the ordinary cause
 of excitement is diminished, to increase it and produce
 it in a higher degree than the ordinary cause can do from
 its own internal energy. This idea has been sufficiently
 refuted. it is a piece of Stahlism set aside with the refutation.

of that doctrine." Thus far D.^r Jones. — now, if what I have advanced in the preceding sketch on Fever be true, the predisponent Cause often consists in an excess rather than any effect of excitability, and the essential cause in a stimulant rather than a directly debilitating power * —

* I don't know how to guard my language here: if I say the essential cause is a stimulus, so it is says D.^r Brown, but it is a debilitating stimulus: if I say it is a sedative, there is no such thing says D.^r Brown. But D.^r Jones says, every every phenomenon proves the cause of the cold fit to be debility, and certainly no one will pretend to deny, that great weakness always accompanies the cold stage of fever; but if the foregoing reasoning be just, this debility is of the negative kind, depending upon a temporary impediment to the due preparation, the due distribution, or both of the causes of strength: debility appears, therefore to be an effect. †

This appears very evidently from hence, that altho' an intermittent may have affected a patient for many weeks, nay for many months, no very remarkable degree of debility takes place and he is during the intervals capable of following his wonted employments; but let this degenerate, as I have often seen into a remittent or continued fever, petechie, vibices, the most extreme

extreme debility, and every mark of putrefaction, presently
 make their appearance; and in a very few days, if the
 utmost skill and attention be not interposed, the patient
 inevitably expires. Not in any sense the cause, or fever, the
 concomitant merely, and not the occasion of the cold fit.
 Dr. Brown and Dr. Jones laugh heartily at the idea of *Vit*
Medicatrix Natura: "it is a piece of Stahlianism (say they) set
 aside with the reputation of that doctrine." But I ask by
 what other phrase they would distinguish that power which
 effects the spontaneous removal of an intermittent paroxysm
 and the debility with which it is accompanied? Such removals
 do frequently take place, they could not take place without
 some cause, that cause is evidently friendly to the system,
 it exists within the constitution itself, and therefore whe-
 -ther it be a piece of Stahlianism or not, seems fairly entia-
 -led to the appellation of the *Vit Medicatrix Natura* in ho-
 -rens; without which power, I am firmly persuaded, that
 the more quickly diffusible, or even the more permanent
 stimuli of Dr. Brown, would be of little avail in the cure of
 diseases. Is there not also a more distinct evidence of this
 power in the reunion of fractured bones, and in the reno-
 -vation of flesh in wounds attended with the loss of sub-

stance; can any man join a broken leg, as a Carpenter mends the leg of a stool, or can we glue on a number of ve^{les} to fill up a solutio continui, in the manner which nature does, when not interrupted by bad surgery. Unless the Braunonians have already recovered (what from their clear, concise, modest, and elegant mode of philosophizing soon ^{or} later they must recover) that inestimable Balsam of Trierabazo, so highly extolled by their illustrious predecessor, the Valorous knight of La Mancha &c.

§" Sancho (says don Quixote) if at any time thou happenest to see my body cut in two by some unlucky back stroke (as is common amongst us knights errant) thou hast more to do but to take up nicely that half of me which is fallen to the ground, and clap it on exactly to the other half of me on the saddle, before the blood is congealed; always taking care to lay it just in its proper place. Then thou shalt give me two draughts of that Balsam, and thou shalt immediately see me become whole and sound as an apple. -- Vidi Ozelli Don Quixote Vol. 1 P. 94.

I say, if they have not already recovered this most precious composition, too surely we cannot. And in the interim to what other power can we look for these salutary effects, but to one resulting, by an almighty fiat, from the

the constitution of our nature, and therefore not im-
 -properly termed the *Vis Medicatrix Naturæ*. upon the
 whole, Dr. Brown's fundamental error in the theory of
 Fever, appears to be the same with Dr. Cullen's--that of
 conceiving the remote cause to operate as a sedative
 (I should have said a debilitating stimulant) power
 directly upon the brain, without previously entering
 the circulation. If this be his opinion, I refer him to
 the arguments employed against Dr. Cullen's theory.

that we may with safety and advantage carry the exhi-
 -bition of stimulants (I do not mean debilitating stimu-
 -ulants) to a greater extent than has commonly been sup-
 -posed, there is perhaps very good reason to believe, and
 the public are indebted to Dr. Brown and Dr. Jones, for
 having insisted more strenuously on this point than
 any preceding writer:--yet it seems by no means clear
 that any general law has hitherto been discovered, by
 which their administration can be safely regulated: in
 medicine, as well as in declamation, we must take
 care that we "derogate not the modesty of nature; the whole
 must still rest upon a careful, a modest, and a well
 regulated experience, constantly observing the

Quaritor in modo, yet never forgetting the fortiter in re.
What has here been opposed to the inquiry of D.^r Jones,
will apply with equal force to the more respectable per-
=formance of another Baunonian (I mean only so far
as relates to the Theory of Fever) D.^r Dickinson's inquiry
into the nature and causes of fever, and I apprehend
that D.^r Gardiner's observations on the Animal Economy
will, upon more mature deliberation, abandon his idea
of the repeated periodical secretion of p^hlegm and bile as
the proximate cause, and its reabsorption as the temp-
=orary cure of intermittent paroxysms, independent of
the continued operation of the remote cause. 

Vol. 1

1844

History

1844

The following is a list of the names of the persons who have been admitted to the office of the Secretary of the Board of Education, from the year 1844 to the present time. The names are arranged in alphabetical order, and are given in full, with the date of admission, and the name of the person who recommended them. The names are given in full, with the date of admission, and the name of the person who recommended them.

1
Doct.^r Armes
LECTURES
on
Midwifery.
Lecture 1.st

The Os Sacrum is not a concave surface, but more properly a triangular one, bent forwards, the cartilage meeting the Sacrum & Os Innominatum it is very thin so that these bones seem as if they were glued together; being the Sacrum & Innominatum at the junction, there is a considerable hollow, which is fill'd up with Ligaments, which is very short and strong, and the union by these ligaments on that account much stronger than if by cartilage, - To the thin edge of the Sacrum below its junction and to the Os Coccygis are attached Sacro Sciatic Ligaments arising from the tuberosity and spine of the Ischium, - the Os Coccygis is generally formed

of three distinct bones - the direction of the *os Coccygis* is nearly
 horizontal, and is a support or stay to the rectum, it being more
 flexible in children than adults the reason some assign for
 children being more subject to a *Proidentia Ani*, - when
 the *os Coccygis* is *Anchylosed* it is not only rendered shorter,
 but turned to a side which encreases the Axis from the fore
 to the Back part. at the lower opening the *os Pubis* forms
 but a small portion of the pelvis the greatest part lying ab-
 ove the *Brim*, the *os Ischium* is divided into its Body,
Tuberosity and Branch. In *Smellie's* figure of the Pelvis it
 is evident the spine of the *Ischia* is broke off, it requires
 some pains to preserve them entire between the spinal pro-
 cess and *Tuberosity* there is a hollow covered with a cartilage,
 over which plays the Tendon of the *sublunator Musc.* - from the
 spine of the *sacrum* *os Coccygis* passes one of the *sacro sciatic*
Ligaments arises from the *tuberosity* of the *Ischium*. - The
Chin sometimes in preternatural Labours itches over these lig-
 aments which prevents the head falling down, till the
 head is moved or rather the *Chin* is moved to the junction of *g.*
Sacrum and *Isium*. below where the *os Pubis* joins is continued
 on each side a very short branch meeting the branches of the
Ischia, which are called the branches of the *os Pubis*. -
 towards

Towards the cavity of the Pelvis the branches of the pubis are very thin, the bones being almost in contact, on account of the angle formed by the Vertebrae Lumborum and Sacrum when the body is erect, the brim of the Pelvis is almost, Vertical hence in pregnancy the womb is supported by the teguments of the Abdomen, and Anterior teguments of the Pelvis and on account of the Womb Tumbling forward over the pubis, the Orifice is drawn backwards & upwards, and so far as to be out of your reach. — when the bones of the os Coccygis is Anchylosed, some imagine that it impedes birth, and advises to press the os Coccygis with a couple of fingers backwards in the time of labour; others to pass the Thumb into the rectum and push it back by that means, but I never knew an instance when the Labour was retarded by the rigidity of these bones, and imagine when those bones are Anchylosed, the os Coccygis becomes shorter and by that means the diameter is enlarged, be it as it will it is a very bad practice to attempt to bend bones back, the Childs head will be sufficient for that purpose, and by our efforts we should endanger a fracture which would be of much more consequence than any rigidity of the Bones, — The motion of the os Coccygis

is nearly horizontal, and is the support of the Intestinum Rectum, through which the faeces daily pass, keep it frequently bending and extending and by this means continues its motion to old age.

LECTURE 2.nd For the most part the brim of the Pelvis Oval sometimes it is nearly circular and is then very capacious, so that the head will come down in any direction, at other times it is triangular which is a better shape than the oval, the easiest way for the head to enter a common sized Pelvis is in the Diagonal: To come out, the longest axis of y.^e Head should lie from before backwards, the occiput being to the Pubis, the head is not fully in the pelvis, till it fills up the sacrum, so that to feel y.^e depending part, you must pass your finger along the perineum you cannot then pass it at all by the Pubis. — The marks of a distorted Pelvis are an advancement of the Sacrum forwards, and the tuberosity of the ischia drawn nearer to each other, also the lower extremity of the sacrum and of Coccygis bent upwards to know whether distorted at the brim, examine if you can distinguish any projections of the bone of the Sacrum, if you can the pelvis is very much so, and the Child's head must be opened before it can pass, but the Basis of the Sacrum may project & not be able to

to feel it, here you must pass your finger behind the *os pubis* making an acute angle, the head will be at some distance from the *Symphysis*, a distortion of the lower opening is more easily and readily distinguished, examine for the angle under the *os pubis* whether it is much acute, also the distance between the tuberosities of the *Ischia* & feel for the lower extremity of the *Sacrum*, and of *Coccygis* whether they are much bent up wards, Inconveniences arising from too capacious a Pelvis for if the orifice is rigid the Uterus will be push'd down by the head, if care is not taken to prevent it, if the *os Internum* is much dilated and the Vagina & narrow as in elderly people with their first Children, its ten to one but the Perineum will be torn, if the utmost circumspection is not used. - If any faeces are collected in the rectum they will be push'd down in time of Labour, and if they have continued along time they acquire hardness and dryness, which prevents their easy passage, the rectum is push'd down with them, hence a *procedentia Ani*. - This evincing the necessity of giving a glyster when the rectum is loaded to prevent the *os Internum* being push'd down with the head, bear a finger or two against the head in time of pain, and endeavour to dilate the orifice when the pain goes off - If the

Head comes down to the Perineum too suddenly, gently
 press your hand against the Perineum in time of pain,
 for by thus counteracting the pains you will protract the
 expulsion of the head till the parts are sufficiently dilated, by
 this means the Woman instead of being delivered by one
 or two pains will have 18 or 20 however the advantage is
 obvious. — In D^r Smellie's first plate of the pelvis the hollow of the
 sacrum and its juncture with y^e Thim is not seen; the car-
 tilage there is much too thick, the Cartilage between ossa Pubis
 much too thin, and the spines of the Ischia are not to be seen; in
 the second the bones are not properly put together the distance
 between the base of the sacrum and Pubis too great; the base
 of the sacrum too high in proportion to the Pubis; the ossa In-
 nominationum are certainly dropt, the Ischioccygis is too short;
 and the spines of the Ischia are certainly broke off; in
 the third the distance between the base of the sacrum and Pubis
 much too short, which is owing to its being perspective and
 the angle of the ossa Pubis is not acute, obtuse owing to the
 same cause; — the principle characteristic of the female Pelvis
 is obtuse of the angle under the pubis — the ridge forming the
 Crim of the Pelvis is round where the Thim and sacrum
 meet, but becomes very sharp anteriorly, therefore never omit
 turning,

turning the Childs head towards the vacuum in puternatural
 birthe, the chin being very liable to hitch on the anterior part
 but if it should fall on any part of the round ridge it
 would easily slip over, also the passage of the Psoas. Muscle
 assists in making it pass easier, but if it should hitch on
 the acute angle before, it would be impossible to pass over it
 the next circumstance to be considered is the lower opening
 which we take from viewing it in the same manner we
 did the brim, hence the two diameters are nearly alike, so
 that if it was rigid all round, it would be immaterial w.^{ch}
 way the head came out, but as the os coccygis is moveable it
 will recede backwards upon the pressure of the Childs head &
 lengthen the diameter; again the sacro sciatic Ligaments
 making the lateral parts posteriorly yield to the pressure, &
 form straight lines become curves, when the most favoura-
 ble direction of the Childs head to come out is with the sides of
 head to the sides of the Mother. When we want to get to the brim
 of the Pelvis pass the finger close behind the pubis, the pelvis
 being three times deeper backwards than forwards, and as
 deep again at the sides than forwards, the depth forwards being
 about two Inches, it is by this we know how much of the head
 is got into the Pelvis, if your finger gets by this means above
 the Brim of the Pelvis, the head has not entered the Brim.

Lecture 3

8

We must consider the form of the Childs head, the head is of an oval shape, view it in what direction you will; the longest axis from the forehead to the chin, the shortest from one side to the other. Let the face pass in what direction it will, it will sometimes pass. If the longest axis, i.e. from the forehead to the chin is the shortest axis of the Pelvis, the head being wholly in the Pelvis, we must alter the position of the head, suppose the Forehead to one side, the Chin to the other, by bringing the Chin under the os Pubis - again suppose the middle of the forehead is the center of view, you take the vortex in here you will find one diameter much longer than the other, suppose the vertex the center of view, the head will still be oval, or if you take the side of the head the Ear being the center of view, the head will still be of an oval figure; sometimes y^e head will come down in this way, but the Child is not come to its full time, there is only one other situation the Occiput preventing here the head is much rounder than in any other situation hence the propriety of a foetus lingering Labour by getting a couple of fingers over the occiput and depressing it, then by lifing the transverse diameter of the head; to know the different positions or presentations of the head by the touch. If the face presents there will be no difficulty in distinguishing it by the Nose, Eyes, Mouth, &c. and the situation of these in respect to each other will point out the situation of the Face;
hence

hence you'll know whether it is properly situated, if not, alter the situation, to examine for the presenting parts, the head being in the Pelvis, you must pass the finger along the Perineum, suppose the vertex presents you will find one or other of the Fontinals; if you feel a fontinal and can distinguish which it is, you can tell the situation of the head, to which part lies the face and which the occiput, as the greatest fontinal is nearest the forehead, the left is to the occiput, so it is only considering what part of the Pelvis a fontinal is nearest to, if the lesser fontinal is nearest the Pubis, the occiput must certainly be nearest the Pubis, and Vice versa if the larger fontinal is to one side the face is certainly to that side, suppose the ear of the Child presents, tho' this is not likely when the Child is come to its full time, In this case the ear will determine you with regard to the general situation of the Head, the small part of the ear being towards the face, Therefore in any presentation of the head that can be; you'll find one of the above parts, either the Face, Eyes, Nose, mouth or one or both fontinals, or an ear so as to enable you to find the general situation of the head when in the Pelvis, till then your finger cannot reach high enough to distinguish well the different parts, the situation of the other parts as shoulders &c are not regarded. If the shoulders stick I never trouble myself to alter the position but only introduce

a finger under the Ham pit and pull gently down, there is a considerable opening behind the Ear where the Occiput joins the Os Parietalia et Temporum, and this in a new born infant is as large if not larger than the lesser Fontinal, and is a most convenient part, when the head after the Body is delivered, can't be extracted without opening it; the Crochet being introduced has a very firm hold, the point resting on the base of the skull. The labia are subject to swelling in time of pregnancy, I have seen each of them as big as my fist, so that the woman could not bring her thighs together, I would endeavour to reduce these swellings before Labour comes on as not withstanding, what Dr. Smellie says, they will retard the labour and make the perineum more liable to be lacerated, the extent of this labia is much more considerable ^{in some} than in others the Orifice of the Vagina being lower down, in the Virgin state and in those women that have had no children the labia are shorter and the orifice of the Vagina higher up; one of the Symphæ is generally higher up, & larger than the other, they extend to about half the orifice of the Vagina, when the Symphæ are preternaturally elongated, they be snipt off with a pair of scissors, the Clitoris is situated below the angle of the nymphæ, then carry the point of your finger directly down, & you will readily find the orifice of the Mæthra, being about an Inch

Inch from the Clitoris and the end of the cartilage, just as you
 turn under it, so that the Catheter might indeed be introduced
 without depending on feeling ^{for} the orifice of the Urethra, we should
 be careful not to pass it into any of the Lacuna, as some of them are
 pretty large, we shall be certain of it being in the Urethra if we feel
 the Catheter by the Vagina, the Urethra is not two inches long, Bar-
 tholin's Prostate glands is twice as thick in some women as
 in others sometimes it is so thick as to appear like a preter-
 natural Tumor to those who are not very well acquainted
 with the feel of the parts in different subjects; - from the var-
 -ious size of this gland and the circumstance of the head
 coming down we need not wonder this is sometimes pushed
 down before the head, which may be productive of great mis-
 -chief. I have seen it pushed down without the labia, as soon
 as you perceive any danger or tendency to a descent of the
 Urethra, you must endeavor to get it beyond the round
 of the head, which is easy to be managed when the pain goes
 off, you push it up as high as you can, the next pain it will
 descend less than before and so you pushing it up between
 the pains till you get it beyond the head. - The orifice of
 the Vagina is triangular, the posterior part of Bartholinus
 prostate making one side of it, the angle opposite to this

where the two sides meet is the Perineum, the Carunculae
 Myrtiformes hanging by y^e Peduncles, as to make the part
 full, the Perineum in the Virgin state may be about an
 Inch and a half, in those who have had no Children not quite
 an Inch, tho' there is this distance the orifice of the Vagina &
 Anus, yet but a little way in the Canals are in contact, hence y^e
 danger in lacerating the rectum if the Perineum is torn.
 The wrinkled part of the Anus is about an Inch, and from
 that to the of coccygis is two Inches, all these parts when the
 head comes down is pushed into a large tumor, and the orifice
 of the Vagina rises up; as the head pushes out the Perineum,
 hence to press strongly upward (as Dr. Smellie advises to prevent
 a laceration) would in fact endanger one by pushing the
 head too suddenly out, in time of Labour a great quantity of
 mucous is secreted which is called the Skew, by passing the
 finger obliquely it is as far in the Pelvis, as the anterior part
 of the Pelvis is deep; when the thick part of the head get below
 the projection of the sacrum, it immediately fall down in
 to the Perineum. In examining Women to know when
 they are with Child they commonly stand stooping a little
 forwards, you now introduce your finger with the Palm of
 hand to the womans back by which means you may feel

the Os Internum; but if you keep your hand in that direction you will never reach the Brim of the Pelvis but you must turn your hand, and the direction of your fingers will towards the Pubis; the head going through the Pelvis passes in a curve always, the advantage of knowing this is, when you have got hold of the head with the Forceps that you may first pull straight down, and then rounding out according to the shape of the parts.

Lecture 4th. A Dropsy of the ovaria may be dissected if it has no attachment, she is incurable in the first months of pregnancy the appearance of the Uterus differs much from the latter Months, it appears an oblong rough Mass so that the ovum appears in the first Months like an irregular mass of flesh and believe moles and false conceptions have often been thought to exist when it was only the Ovary, the Umbilical cord is composed of one Vein & and two Arteries, tho' sometimes there is but one but then it is very large, there is generally but one placenta to one Child, the Navel string goes off from the middle of the placenta its length is very undeterminate, I have seen it four feet long and I have also seen it not above half a foot in length, either of

these have been thought to retard Labour, but I am not clear at
 all in that, the Navel string is sometimes very strong, & other
 very easily broke, when the Placenta is very tender press on it
 with two or three fingers, as one will be apt to go through it; the
 membranes are closely connected together, the inner one is
 the Amnion the thin transparent membrane, the external is
 the Chorion dense and more compact. The Vagina becomes more
 or less wrinkled as the Woman has had one or more Children;
 having more Rugs in the Virgin state, but you must not be cer-
 -tain of a Woman having had Children from the Rug being ablit-
 -erated; as the Fluor Albus, will efface them, the Valvula Morgani
 seated in the neck of the Uterus (I believe) are a number of
 excretory ducts which secrete the mucus (call'd the Sheen, and
 I imagine they are the seat of the Fluor Albus; hence the neces-
 -sity of keeping these places clean by Injection; injecting
 these parts twice a day and giving 3 or 4 fl. Ounces Night & Morn-
 -ing for a few days, has often bid fair to remove that complaint.
 The membranes called the ligaments of the Uterus are the
 Perimetrium acting as a Muscley connecting the Uterus and its
 appendages closely to the sides of the pelvis, as the Muscley
 connects the intestines to the spine; so they allow the impreg-
 -nated Uterus to rise a great height above the Prim of the Pelvis.

Lecture 5.

If the Arteries of two Placentas Anatomists as D. Smellie
 says he has seen two cases tis obvious how necessary it is to
 make two ligatures on the Navel string, I don't know in
 two in cases whether one or two placentas are most common, if
 they are generally in contact with each other, When there are
 two placentas, if the second is not delivered immediately after
 the first, the placenta of the first will frequently separate
 but if not separated, by no means extract it before the Solu-
 =ery of the second child; we should give our assistance to the
 Women in extracting the Placenta or else it may become put-
 =rid and produce putrid fever &c. all Quadrupeds have
 the placentas divided into a number of portions, Women
 have sometimes so much pain in expelling the Placentas as
 the Child; In a miscarriage sometimes it is not in our
 power to bring away the placenta; and it may remain
 in the Uterus Ten or fifteen days & come away in a putrid state
 If the membrane break and Women is not above five months
 gone the Child will come away; when a woman is about four
 months gone there is about a lb of water in the Ovary; which
 rather opens towards the end of pregnancy, - the more the
 Child is capable of resisting the Pressure of the Uterus the
 less is the quantity of water surrounding it, when there

is a large portion of water, the Child by the gravity of its parts
 will recover its proper situation; if altered by any accident
 but if the water should be diminished and the Child barely
 floats, it must beat a little on the surface of the Uterus there-
 fore is prevented from altering its position, so that if by
 any accident or any other means the head should be thrown
 into a wrong situation at this time tis not probable it
 will recover its former position; about the 7. or between the 7.th
 & Month the Child is sometimes thrown into a bad situation
 by over reaching and falls &c. when it does not recover its for-
 mer position again, the Navel string become twisted
 round the Childs neck &c. from the variety of motion it
 makes in the first months, we observed that the unimp-
 regnated Uterus was entirely in the Pelvis, its fundus
 considerably below the Brim; that it was triangular, and
 its neck almost as the fundus, flattened towards the bladder
 and rectum; that the appendages, the Fallopian Tubes &c.
 when off at the upper Angles; As fluids passing undisturbed
 the first alteration of the Uterus when become impregnated
 will be gradually towards a round form, you can't get your
 finger high enough up by the Anus to reach the swelling of
 the Uterus in the first Months: as has been recommended
 by

By some authors; The Womb will enlarge till confined by
 the Pelvis, and as it cannot descend on account of the Perineum
 and parts below it must rise above the Pelvis into the
 Abdomen for it cannot stretch in any other direction, thus
 we may judge of the time of pregnancy by the height of the
 Tumor in the Abdomen, viz. for almost the three first months
 of Pregnancy the belly rather flattens than enlarges, between
 the second and third months the Uterus begins to enlarge
 from the Pelvis, after this time you may sensibly feel the
 Tumor of the Abdomen if the woman is not very fat, Dropsical
 or the Intestines got before the Uterus, - between the 4th & 5th months
 the fundus of the uterus is as high as the navel; - between the
 7th & 8th Months, half way between the navel & umbilicus Cordis
 tho' the figure of the woman may alter this circumstance
 as in short waisted squat Women broad in the haunches
 the Uterus will stretch more laterally the fundus arising so
 high there being more room laterally, whereas in a little woman
 narrow in the haunches, and with her first Child the reverse
 will take place: - As the fundus stretches, the Neck shortens
 in the 2nd or 3rd Month you can not reach the fundus; between the 4th
 and 5th Month the Neck is reduced to half its usual length, between
 the 6th and 7th to a Quarter, and towards the ninth it is entirely

obliterated sometimes you are sent to a Woman; sup-
 posed to be in labour by examining you may not only
 know that she is not in labour but that she is two or three
 Months to go, — Towards the end of Pregnancy the insertion
 of the Fallopian Tubes is almost halfway down the Uterus
 this shows that the part above the Tubes stretches much
 more than those below the Peritoneum is the outer cover
 of the Uterus to which it is connected by cellular membrane,
 whether this substance of the Womb be vascular only or partly
 vascular and partly muscular, is not determin'd, — The
 Uterus is of the same thickness in the pregnant as the un-
 impregnated state, it is more spongy, the Tubes at a great
 distance and the vessels large, If a Woman dies 5 or 10 ^{Min} after
 delivery, the Uterus will be found much thicker but
 this is by no means the time to determine the thickness of
 the gravid Uterus, it should be examined when distended
 with the Ovum; in Albinus's plates, we know when the Mem-
 branes remain in the Uterus, as we can't see any of the Valvulae
 Morgagni, as the Placent drops down, it drags and tears off
 the Membranes from the surface of the Uterus we know y^e Arteries
 from the Veins on the Placenta as the Arteries run over the
 veins, I have met with a Navel string a prodigious ~~length~~ ^{length}

length which was twisted five times round the Childs Neck. The intention of the Placenta being divided into Lobes may probably be to accomodate it self more readily with the Uterus, I have seen a woman that gave her full time; when the whole Ovary came away together this was a very tedious affair, the Woman being in Labour a Week; in such a case you must open the bag to give the child an opportunity of breathing, as far as the Valvula Morgagni reaches, so far is the neck of the Uterus; The disproportion between the vessels of the Uterus and Placenta shews there can be no anastomosis between them, from these delicate blood vessels happen the sudden violent flux of blood on the separation of the Placenta, & the Womb contracts quickly there is a violent flux of blood but if it is soon check'd, but if slowly or not at all, a violent flooding remains, and the Woman will sink under it, if not check'd for it, not the sudden push at first that weakens the Woman as it comes from the Uterus only, and contracting suddenly, No considerable quantity is taken up from the circulation; Floodings are not stop'd by extracting the clotted blood from the Uterus, but by the introducing of the hand into it causing and stimulating the Uterus to a more powerfull

contraction, hence Vinegar is a common application, ^{ch} which acts by its coldness and stimulus; for clotted Blood is not the cause of flooding for the Uterus contracting expels it but if there should be a flooding, clotted Blood is always found in the Uterus, as a consequence of the flooding, the blood soon coagulates. A flooding is owing to a weakness or want of energy in the Uterus; — the Placenta may be connected to any part of the Uterus, Fallopius imagined it was applied always where one or other of the Fallopian Tubes go off; and some think to the fore part, and others to the back part; — A flooding sometimes happens in the beginning of labour, and pretty violent; this is not owing to the stretching of the Uterus, for as the labour comes on it will stop; and it is not a necessary consequence because a Woman floods, that she must be delivered by Forceps; for if by a gentle Irritation you can bring on labour pains the Flooding will soon be stop'd, the Os Uteri sometimes lays to one side sometimes very far back &c. and sometimes one part will stick on the Childs head commonly the fore part which may very easily be removed; Ruysch tells us that he examined a Woman's Uterus who was ~~stabed~~ ^{stabed} immediately after coition and he found the Semen Masculinum in the fundus ^{and}

and come in the Fallopian Tube, and that the Simbra off
 Fallopian Tubes where embracing the Ovarium; therefore
 for conception to take place, the semen Masculinum
 must be thrown into the Uterus, and taken up by the fal-
 lopian Tube; from thence it gets into the Ovary the Ovarium
 impugrates it till at length the Ovary swells, quits it,
 vidus, is received into the Tube, and falls down into the
 Uterus, soon after the Ovary enters the Uterus it adheres or
 comes into contact with it - the Arteries of the Uterus Ana-
 tomose with each other; after they divide into branches, y.
 Arteries Anastomose with the veins so much that you
 may very soon clear the Placenta of blood by tying one artery
 and infecting the other, so that the greater quantity of blood
 to the Child by the Arteries, is returned by the Veins; it is sup-
 posed that about the sixth or seventh part that comes from
 the Child enters the Uterus, therefore this proves that the
 circulation is not carried on directly on from the Child to
 the mother, but that the Placenta absorbs a quantity of this
 fluid from the Uterus for the nourishment of the Child; ~~when~~
 when a woman is about three or four Months gone with Child,
 should the Membranes break she would miscarry, as at this
 time the tender Infant is not able to resist the contraction

of that the Uterus makes upon it, as the waters are not there to keep the Womb equally extended; hence many cunning baggages have brought on a miscarriage by puncturing the Membranes with a probe or a knitting needle in the early Month of Pregnancy, a Woman some years ago went about Yorkshire helping the young women to miscarriages thro' this means by which she made a livelihood.

Lecture 6.

By examining we understand the introduction of one or two fingers into the vagina, or the application of the hand on the abdomen, the Index is to be preferred as we generally make use of that in distinguishing small bodies and it is less confined than the others are, the best posture for examining early in pregnancy is that the Brim of the Pelvis be horizontal, I. e. the Woman half sitting half lying, tho' I would have you examine the first time in Bed, afterwards the Woman will readily comply with any other situation you may think proper, - the most common is lying on her side, or standing stooping forwards a little, Lubricate your finger and pass it curv'd along the thigh, getting it between the labia thence by moving it from side to side into the

the Vagina; As you introduce it, it will be the best direction to examine the state of the orifice for commonly if you turn your finger you will not get it far enough back to examine the state of the Os Uteri to feel for the head you must turn your wrist, as you can seldom find it without; The intention of examining, is to discover whether she is with Child, the common symptoms not to be depended on except a discharge of Milk, and this be-
 -ast as well from a morbid superfluity of the Menstrues; Suppose a Woman three Months gone with Child, you will probably not be able to discover the shortening of y^e neck, nor feeling the stretching of the fundus, and the state of the Orifice, at this time will not furnish you with any indication, nor is there any swelling of the Abdomen, you cannot therefore be very clear in discovering whether she is with Child at this time; you may however form a very good guess from these circumstances, Viz, the Womb being larger is heavier and filling the Pelvis it presses on the lower part of the Vagina and Perineum hence the Os internum is lower than common or natural, when you apply your fingers against y^e Orifice & attempt to raise it, it rises with more difficulty than in the unim-

=pregnated state, when it is very easily mov'd. If you apply a finger to a side & attempt to move it laterally, its moved with greater difficulty therefore at this time the Uterus sinks lower down & yields with more difficulty than in the unimpregnated state, you cannot neither feel the length of the Neck, nor reach so high as y.^d fundus, when y.^d Neck is raised to half its length and the tumor in the Abdomen as high as the Navel, the Woman is six Months gone with Child & in common you may feel the Child about y.^d 6th Month. Another sign of Pregnancy is the Os Uteri being thrown farther back, so that sometimes you cannot reach it, and this happens sometimes in the beginning of Labour, If it was not for examining by the Vagina, We should never be certain wether a Woman was with Child or not, I have had Women apply to me as dropsical, when upon introducing my finger into the Vagina I have felt the Child, True or false paines are to be distinguished by examining, if you find the rippe of the Uterus open, and a soft Membraneous bagging in time of pain, and no bagging when the pain is off, the paines are true, sometimes in Women who have had children, the Os internum will be open enough to admit of two fingers, and soft with the moisture of the parts.

if

If such Women have pains which are false you will find
 no bagging in of the Membranes in time of pain; Nor bearing
 down of the whole body of the Uterus, on examining half an hour
 after the woman as had several pains, and you find the parts in
 the same situation, you may be sure they are false pains, and
 therefore must ^{endeavour to} remove them; The cause of false pains is often
 something retained in the Intestines, to remove which we
 order the Carminative Clyster, as Decoct. Filic. Chamom, with a
 few Bacc. Junip, afterwards an opiate. If they are the true pains
 the above can be of no service Particularly the Clyster - In staying
 half an hour or an hour in the room you may certainly know
 whether the woman is in labour or not, it is by examining only
 we know what kind of labour the Woman will have; If we
 perceive the head on the Basin of the Pelvis, and no unfavourable
 form of the Pelvis, and the Os Uteri much dilated, we may pro-
 =gnosticate a Natural labour. If the head presents and you feel
 the Base of the Sacrum, you must prognosticate a Labourious
 Birth, again in place of feeling the Suture like a line, you feel
 it a finger or two breadth, prognosticate a Labourious birth, from
 the great size of the head: there are several diseases that can't
 be distinguished without examining. Weak persons in a Flux
 Albus, complain of a bearing down which we find to be nothing
 but y^e sensation Women further distinguish Labours into Sleepy

which we reckon a safe, into sick, which are also safe, for we don't
 find excessive Vomiting, as it brings down a greater moisture
 and assists the expulsion of the Child, as to day labours they
 are very tedious and into wet Labours where there is a good deal
 of mucus, or the water ouzes at a considerable time before, this
 is tedious, but by thrusting your finger between the Child's head
 and the pubis, you'll make an outlet for the Water, and for-
 ward the Labour; the method of placing Women half sitting
 half lying, is to be objected too, as by drawing up the Thigh, the
 skin must be drawn up too, hence the Perineum is tight and
 in greater danger of being tore another objection are the assistants
 are apt to cramp the Woman by holding the thighs tight in
 time of pain; also the woman is exposed to cold and is star-
 ing you in the face, In the Usual, English Method y^e woman
 lies easy warm and comfortable as her situation will admit off:
 all the objections is that you are not assisted by the weight of the
 Child, this may be remedied in lingering Labours by changing
 the position, as walking, standing &c. in short is the best position
 in all different species of labours, except in Forceps Cases: the
 Woman may take her choice, whether she will be delivered in her
 cloaths or the naked bed, we should prefer the latter to prevent y^e
 Bed being spoiled, spread a large red skin, under and above
 several

several folds of sheeting and then clean sheets and over y.
again several dirty sheets; there should be in the room
plenty of cloaths, Pomatum thread & scissors, and when
near over a Bason of warm water, should be provided to receive
the Placenta — In examining for y^t stretch & contents
of the Uterus, you must turn your wrist, and pass your
finger as far as you can, close behind the os Pubis, then keep
it there, and you'll feel the head of the Child beat against
your finger, If you would feel for the os Uteri, you must keep
your finger Back, not turning y^e Wrist, and moving it from
side to side, you will always feel it unless it lays beyond your
reach, — In labours when the Cord appears without y^e Labia
before the head, you may prognosticate the Child's Death, as in
all probability y^e circulation will be stop'd, by the head com-
-pressing it against the bones of the Pelvis.

Lecture 7th

A Natural Labour may be divided into three stages the
first stage, begins with the first symptoms of Labour contin-
-uing till y^e Membranes are broke, the second from the breaking
of the Membranes to the expulsion of the Child and by dividing
the funis. The third is from the dividing of the funis to the ex-
-tracting the Placenta. the second stage is much quicker

then the first and the third is generally quicker than the second
 some times a discharge of Mucus happen a day or two before
 Labour, but when it is accompanied with pain, the Woman
 is in Labour, another sign of Labour approaching is the fall-
 ing of the belly, this is in some measure owing to the Childs
 sinking lower, the head falling on the Brim of the Pelvis, or
 some portion of it within the brim, Another sign is a frequent
 desire of making water, yet notwithstanding all these the Wo-
 man cannot be said to be in Labour without several pains;
 the pains arises first in the back, goes off, and then returns
 with greater violence, and extends further, and so on till it
 surrounds the whole belly like a belt when there is a bearing down
 Some times the pains lies entirely forwards from the beginning, this
 however furnishes you with no Indications as it is probably ow-
 ing to the different form of the Pelvis, generally a discharge of
 Mucus is subsequent to pain, this discharge accompanied wth
 pain is a certain symptom of Labour, — in the beginning of
 Labour there is a constant desire of making Water together wth
 pain & other circumstances, she generally has a shivering and
 complains of a cold tho' her pulse is full and strong this soon
 goes off, ending in a hot fit, which terminates in a sweat, this
 shivering happens at the beginning; as Labour goes on Squam-
 ishness

and Vomiting arises, the pains increase and they have more of a bearing down, with a sensation as if they wanted to go to stool, all the portion of the Womb, with the Brim, bears down in time of pains, and the Membranes endeavour to get out as the pains go off the Membranes are relaxed as is y^e Orifice which appears much larger, than in time of pain, when tense. Contraction and relaxation weaken the Orifice more and more so that it gives way by degrees - a great deal of the progress of Labour is to be acquired of the Nurse, and your own. Sitting some time in the Room observing the Woman for I would not advise you to put any questions to the Woman herself or to examine her for sometime after you are in the Room unless by her pains &c. you imagine Labour to be pretty far advanced, for probably from the fright of seeing you come into the room her pains go off for some time. In the interim you should employ yourself in asking the Nurse some questions as whether or not she had any shiverings when the pains are situated whether she has a frequent desire to make water & whether she has any sickness or Vomiting &c. When a pain comes on observe how she bears it, if she complains and talks during the pain, Labour is not farward. for afterwards when she has had strong bearing down with a sensation of voiding something, increased pain

will not admit of her speaking and complaining much,
 But she keeps her breath in and exerts her strength in
 bearing down sometimes a woman is very ungovernable
 in the beginning of labour especially with her first child, but
 generally when it is necessary she is quieter, for the sensation
 of something coming from her, makes her exert herself that
 way, when you want to be satisfied in regard to the progress of
 the labour advise the nurse to lay her mistress on the Bed,
 you then sit by her, and when a pain comes on pass your finger
 lubricated up under the cloths and examine her if you find
 the Orifice ^{but} a little open, and the Membranes but protruding a
 little, do not try again for some considerable time, nor confine
 the woman to her Bed, but let her take her pains in y.^t position
 she pleases when you find her pains come on stronger, Perhaps
 an hour or two after you examine again when the orifice will
 probably admit three finger which before would not admit one
 sometimes the head acts as a plug preventing the discharge of
 the Waters above it, at other times the whole comes out at once
 if the Membranes should break when the Os Utteri is small
 being no larger than a shilling or a little more the head has then
 no tendency to stretch the orifice, but pushes it down hence this
 is one cause of lingering labours and may be the cause of a
 Proceertia Utteri here we should keep the head up during
 pain

Pain, and gently dilate the orifice when the pains are off
 else the os internum will be in danger of being pushed with-
 out the orifice of the Vagina, when the posterior part of the Os
 Uteri gets beyond your reach, it is a good sign, the Membranes
 not breaking soon enough is a cause of a tedious Labour, as
 well as when they break too soon, here we should follow nature
 for as at the time they should be broke she does it thirteen
 times out of twenty, therefore our breaking them the twentieth is
 absolutely necessary, at the same time assisting nature,
 there is only one exception to this that is when a Woman
 is in Labour of her first Child, here we would not break the
 Membranes till they protrude through the external orifice,
 as by keeping the Membranes unbroken we Protract the Labour
 and give time for the stretching the external parts, when the
 Bag appears between the Labia the Membranes should be
 broke in Women who have had Children the membranes
 should be broke when the os Uteri is as large as ^{the top of} a moderate ^{size} Box,
 unless a considerable portion of the convexity of the Head can
 now push through the orifice, which will have a much better effect
 in dilating the orifice than the membranes with the Waters
 and Labour will be much expedited, as a part of the Child will
 now easily pass than the whole (Ovary) which otherwise have
 a tendency to come away, and in such a patient there is

little danger of a Laceration of the Perinaeum, the head generally makes very little advancement till the Membranes are broke after which it comes on very fast, you should therefore when you expect them to break soon order the nurse to get her Mrs. Bed ready, you cannot determine the exact situation of the head with any degree of certainty, till it is in the Pelvis, this it may readily determine, In a natural Labour the Childs head being in the Pelvis you will find the upper Fontinal to one or other of the Groins and the occiput must be on that side, suppose the left and then the face must be to the opposite part of y.^e Pelvis to the junction of the sacrum with the right os Ilium, If you put your finger behind the Pubis you'll find an Ear lying to a side of the cartilage, & by feeling the smooth part of the Ear you know where the face is, after this the head resisted by the perinaeum & presses in a circular direction, when the head is come out & the body does not follow apply one hand over the occiput, the other under the Chin and draw it along as you may introduce a Finger and hook it under the Arm pit, if the Child be strong it cries as soon as born, for a Ligature of the funis lay 5 or 6 common Threads together let them be seven or eight Inches long, The first Ligature to be applied four fingers breadth from the Navel then apply another a little distance from that towards the Placenta, and with

a

a pair of sissors divide the funis between the ligatures all this to be done under cover, you then call for a receiver which is a piece of flannel lined with dimity to wrap the Child in and deliver it to the nurse the next stage is to extract the Placenta there is no manner of doubt but the placenta would be cast off and expelled naturally but it would be along time first and attended with great pains and fatigue to the patient, and remaining in the Uterus it would putrify very soon, and cause fever which might destroy the Patient very soon, sometimes the Uterus contracts below the Placenta like an hour glass, here it would not come away but by dissolving. therefore having the Placenta to be expelled by nature, would be attended with troublesome and often dangerous consequences. so it is our business to extract the Placenta before we leave the room, tho' I would by no means advise you to attempt it immediately after the removal of the Child but wait ten or fifteen minutes longer till pain comes on. Employing part of your time in examining the Belly of the Mother to know if there is another Child; to extract the Placenta you take two or three turns of the Funis round your thumb and middle finger of your left hand according to the length. then lighten it and introduce two fingers of the right hand into y.^e vagina

along the cord pressing it down in the direction of the os coe-
 -vix, when you reach the substance, press it gently with y^e ends
 of your fingers in the hollow of the sacrum when you have
 got it fully into the hollow of the Pelvis pull it out in the
 circular direction, the Orifice of the Uterus is generally thin
 in the first Labour, when the membranes are broke that shew
 uncovered by the Uterus; is uncovered by the Membranes as
 they tear from one side to the other, the reason I advise two
 Ligatures is first clean lines, and by this means I think dif-
 -ferent to (D^r. Smellie) that the Placenta will be more readily
 separated from the Uterus, for certainly it is most reasonall
 to imagine, that if the placenta remains distended and the
 Uterus contracting they will more readily disengage from
 each other then if both act together, By examining the Wo-
 -mans Belly after the Child is born, you will readily perceive
 whether there is another Child in the Uterus, if there is not the
 Uterus soon contracts, so as to be in contact with the Placenta,
 and you may feel it like a round ball: but if there is another
 Child you will feel a hard Tumor of an unequal surface
 Extending to the Navel or higher. in this case a finger or 2
 may be introduced, and will generally meet with a fresh
 bag of water, when it presents fair, nature is always suffic-
 -ient to expell it, but be sure you find a second Child before
 you

you say there is one for when the placenta comes down into the Vagina it may be mistook for a bag of water, after the first Child is born, and you imagine there is another, and your fingers is not sufficient to find it, you must pass your hand into the Uterus, and if you perceive the Child does present fair you must act as if there was but one Child.

Lecture 8.

The first part stretching of the os Intermum is much more slow than the second or latter part for as it increases in size the dilatation goes on with more ease and quickness, in the Beginning of Labour, the Vagina is so small as to contract on a single finger, when considerably advanced, it appears large enough to admit your hand, and this before either the head or Membranes are pushed, into it, to cause a stretching, therefore the enlarging of it, entirely proceeds from relaxation which is the effect of pain, for more pain a woman has ceteris paribus, the more will the parts be stretched and relaxed; when the head comes down in the direction Doct. Smellie supposes it does Naturally; the finger must pass with much greater difficulty and much higher up to reach the fontanel, than when it comes down in the diagonal, because when in the diagonal the fontanel is more inclined to the fore part

where the Pelvis is the narrowest, and as it is not much con-
 -fined by bone, as to a side, the finger will pass much easier,
 when the head rests upon the Osim of the Pelvis, you cannot
 know the situation of it as you can only see the depending
 part of the head, but you may be pretty easy if the Pelvis
 be well formed as at least forty nine out of fifty will be
 natural labours sometimes the Membranes break about
 the Childs Neck and shoulders, when the head comes out cov-
 -ered with them, this is called the Cawl or Kings Hood
 sometimes the whole body is covered, and sometimes the
 Membranes being Preternaturally strong, the whole Osium
 comes away together, in all these cases, the Membranes
 are to be removed, from the Childs face directly to let it breathe
 in the first stage of a natural Labour we have nothing to
 do, for the membranes dilate the parts more effectually cer-
 -tainly and safely than we possibly can, indeed when the
 membranes break to soon, and the head as a greater tend-
 -ency to push the osific down than to dilate it, we must
 support the head in time pain and endeavour to dilate y.
 osific when the pain is off, The Membranes being broke and
 the head in the Pelvis, we must sit by the Woman, & pretend
 to assist her, or else we shall appear cruel, as her pains
 are

are now very violent, all we can do is to Introduce a Finger into the Vagina and press gently back wards in time of pain which encreases the sensation and provokes the Bearing down and makes the woman think the Child near expulsion. Hence she exerts her self and her pains become stronger and more effectual, when she pushes against the perinaeum, apply your hand fully and gently upon it, and with your other hand throw the Labia aside, After the first Child we should not press on the Vagina with quickness the Labour, for we must do nothing to hasten it, sometimes it is necessary, when the pains are violent, and the parts are insufficiently dilated, keep your finger against the head in time of pain, to prevent it from coming down too fast, and then by giving time for the external parts to relax, we should likewise desire the Woman to moderate her pains as much as possible, If the Child does not cry when Born allow the circulation to go on between it and the Mother and endeavor to rouse it, to answer that intention there are a variety of ways, as good as any is running your finger down the Child's throat by which method you will remove the slime lodged there about its Fauces and make it Puke.

Lecture 9th

38

If you attempt the extraction of y^e Placenta immediately after the expulsion of the Child, you put the Woman to a deal of pain and would meet with difficulty in bringing it away; where as if you wait ten or fifteen Minutes, then comes on grinding pains, and it is very easily brought away, in every Case I would advise you to examine the belly before you extract the placenta, let the Child be watched, that by the bleeding of the Navel string, which may happen to the best of us, is not lost, take the cloths you applied to the external parts, after the delivery of the Child, when you are about extracting the placenta, and put an edge of it under the woman's Breach, so that when the after Birth comes away it may slip into it, as likewise any clotted blood &c by which means all may be removed together, which will prevent a great deal of wet about the Woman, the Placenta being above the Brim of the Pelvis you must pull at right angles to bring it readily into the Pelvis, i.e. towards the Os Coccygis which is done by pressing the Tunica backwards with two fingers introduced into the vagina. if the Placenta is fixed to the left side of the Uterus, your direction must be to the right, and a visa versa, so soon as the separation takes place you will find the blood run down your hand, when your hand can reach the placenta press gently into the hollow of the Sacrum with a couple of fingers continuing to shift

Shift the place of the perfure least you should tear it, which is some time very tender, when you have got it fully into the Pelvis pull it circularly out, if the Membranes should stick after the Placenta are extracted, lay it down gently and take hold of the Membranes with a cloth pulling gently; and by observing these rules you will never tear the Placenta and scarcely ever the Membranes, Appearances to the separation of the Placenta are the Woman Coughing, bearing down as if going to stool, blowing into her hand or any thing which obliges her to strain, you may also order the Nurse to go to the other side of the Bed, and rub her belly gently, which stimulates the Womb to contract sooner than it otherwise would do; these circumstances duly observed as may be necessary in 99 cases out of 100 there will be no occasion to introduce the hand into the Uterus to extract the Placenta. — the Uterus is in a languid inactive state after the delivery of the Child being weakened by its violent contraction in expelling the Child. therefore if the Placenta should be fixed to the superior part of the Uterus, and we should attempt to extract it suddenly and immediately after Delivery, we should run a great risque of inverting the Uterus, if this should happen it should be immediately return'd by the Hand. The grinding pain which generally happens 10 or 15 Minutes after the

expulsion of the Child shows that if the Uterus begins to contract
 therefore now is the time to attempt to extract the Placenta,
 if it cannot be extracted after waiting half an hour or an hour
 longer and trying the Methods before recommended, it is then time
 enough to introduce the hand, for the mouth of the Womb is large
 enough for that purpose, at this time lingering labours may
 arise, from the want of sufficient pains, the woman being
 weakened before by a Diarrhoea want of rest &c. it has been pro-
 posed in such cases to give Stimulants, such as brandy or
 other Liquors the Puls. Ad partum &c. but I believe these are of
 more prejudice than service, I would try to procure rest by an
 opiate and to recover her strength by nourishing foods Broths
 Jellies &c. Again Labours may arise from a narrowness of the
 Pelvis, or large size of the Child, here you are to encourage the
 Woman by prep. for the Perineum, they may arise from the
 Membranes breaking too soon, then the Head must be
 supported in pain, and when the pain is off the orifice must
 be dilated by introducing a finger and turning it into a
 circular manner, if the longest diameter of the Head should
 lay from side to side, that is the longest axis of the Head lying
 before the spines of the Ischia this is unfavourable situation
 may sometimes be altered by the fingers, In such a case direct-
 ectly

behind the Cartilage you find an Ear and there is some space
 between the head and the Cartilage, you may know on what
 side the face lies, by the smooth part of the ear, to assist then
 in getting a couple of fingers to the Ear you must then move
 towards the face, pushing the face into the diagonal Backw.
 by carrying your fingers round, and drawing down in time
 in time of pain, or you may endeavour to raise y.^e occiput
 forwards with a couple of fingers round it, but these cannot
 both be done at the same time, as Doct.^r Smellie advises, Ling-
 -ering labours have been said to arise from the twisting of the
 Navel string round the Childs neck, or sticking off.^r Shoulders
 over the birm of the Pelvis; if so it is impossible in either case
 to get up the fingers to remove the obstacle, tho' I am not
 clear that the difficulty of the Head coming out is ever
 owing to either ~~one~~ of the above cases, for the Uterus always
 contracts close on the Body of the Child, so as the head falls down
 the Uterus follows it, therefore the Navel string cannot be
 lightened till the head gets out, and there is a greater distance
 between the vertex and top of the shoulders, then the Pelvis
 is deep; therefore this cannot prevent the head from coming
 out, the retraction seems to be owing to the contraction
 of the external parts, indeed sometimes when the Head

comes low the pains never go off, then there is no retraction of the head, but in all these natural labours where the pains intermit you will evidently perceive the retraction, Linger-
 =ing labours have been said also to proceed from a rigidity of the Os coccygis, I never knew this to be the case, for when this bone is Anchylosed it becomes shorter and turned to aside, but admitting it so, the assistance recommended is to press the bone backward, now the bone cannot retire without breaking, which might be of very bad consequences, again it was long and rigid it would not be any obstacle in all probability to the passage of the head, as the long axis of the head diminishes in the diagonal, till the head gets far out, and the fore head beyond this bone, but supposing such a case should happen, that the fore head should stick at the Os coccygis, I apprehend the best method would be to apply the Forceps, and turn the head into the diagonal. Linger-
 =ing labours may arise from a rigidity of the soft parts which is the case in Elderly Women near Forty of their first Child, nothing can be done here, but give time for the relaxation of the parts for the pressing and rubbing them can be of no service but may produce much mischief by galling, In-
 =flaming, and bringing the head down too fast on you, which will have a great tendency to produce the very accident you intended to avoid, When the perineum is torn it always happens from
 a

a quick labour when the pains are strong. Pomatum is of no service to relax the parts, all the use of it is that the fingers may be introduced with more ease, any thing of a watery kind will relax as glysters in the beginning, sitting over a steam of warm water &c. - In every woman of her first Child there is danger of a laceration in the perineum, therefore I would advise you not to break the Membranes untill they come without the vagina; when the perineum is stretched, the orifice of the vagina is thrown upwards, therefore by scooping the head upwards, as Doct. Smellie advises, you push it suddenly out before the orifice is properly dilated, and greatly endanger a laceration, we would only press gently on the perineum, and by no means scoop up, leaving the expulsion entirely to nature, If the Head is in a right position, i.e. in the diagonal, If the Occiput is tilted upward it will cause a lingering labour, to remove this the Occiput must be depressed, by raising the Chin: The Doct.^r who advising us to have great patience in women with their first Child, especiall if Elderly, he says that a little time ago he was sent for too a Lady about 20 years of age with her first Child the membranes broke too soon, and she had afterwards pretty strong pains, but the parts being very rigid, being not nearly sufficiently dilated for the expulsion of her first Child, he could feel the Childs head very plain, so as to be certain it prevented fair, two hours after the Membranes broke, her friends were very uneasy that she was not delivered, upon which account another person was called in who gave his opinion that the Lady could not be Delivered without

the application of Instruments; the Doct^r objected to it and said she would be delivered safely without, and if any was made use of directly there would be the utmost danger of both woman & Child being destroyed, upon that a third person was consulted who said that in a little time she would be delivered without any violence, but that there would be great danger if it was hasten'd with Instr^{ts}. Both her & friends were then satisfied to wait and she was safely delivered about four hours after of a fine Child.

Lecture 10th

When you have got the Head into the diagonal as a love directed, if it does not come readily along get the finger round y^e occiput and depress it the application of the hand to the Perinaeum will have as much effect in keeping the head down as sinking the ends of the fingers in behind, or the fingers in Ano; till the head is very low down, if you attempt to hold it down by a finger in the Anus (as directed by Doct^r Smellie) instead of answering the intension you push it up for

Laborious Births, are these where the Head preventing cannot be expell'd by nature, they are owing first for want of sufficient strength or pain, Secondly to the Pelvis being too narrow, Thirdly too large Dropical Head Fourthly to an unfavourable situation of the head: in the first case where the Head presents fair and is not over large, now the Pelvis is distorted, but the Child not being expell'd is owing merely for want of sufficient pain, we must assist nature by drawing the head away, to answer this intention

the Ancients naturally proposed a Garter to be used getting it over the Chin, or occiput and then draw the head along, they also proposed to dilate the parts with an Instrument which they called *Speculum Nativis*, and separating the bones of the Pelvis. but how shocking, absurd, and dangerous such a sudden dilation and distraction of the soft parts must be; will appear to everyone. The application of the fillet ships &c. tears the parts therefore by no means advisable nor recommendable nay it has been found to cut to the Bone, therefore considering these ill conveniences. Practitioners in this Art set about finding some more eligible Method of extracting the head, hence Forceps were invented, Doct^r Chamberlain had a secret where by he Deliver'd Women and preserved the lives of their Children when no other could, which he left as a legacy to his Son and it was never divulged, but it is now generally thought, that his Method was y^e Forceps, the first forceps that came into use in England was Chapmans which were two blades joind like a pair of tongs with a nut, various improvement have been since in them, but the greatest by much was Doct^r Smellie, for he considered them in a more mechanical light, and as he used them most when y^e head was in the pelvis, he with very good reason reduced them in their length, he also advised them to be applied over the ear of y^e child because the head there is narrowest and consequently the more room for the forceps & less danger of wounding the woman, He proposed the whole blades should be in contact with the Childs head, and thus pressing of the head with the greatest firmness then otherwise, therefore less force in squeezing would

be required, and indeed the less force we use provided it be sufficient to extract the Child the better, in what cases then and in what manner are the forceps to be applied, they are never to be applied but when the head is in the Pelvis, the more the occiput is thrown forwards, the more easily will be the application, they should always be applied along the ears.

Lecture 11.

When observed that the forceps were only to be applied when the head was in the pelvis, and always to be applied along the sides of the head over the ear - hence some positions of the Head are easier for application of y.^e forceps than others; - the first case and by much y.^e easiest for y.^e application of y.^e forceps, when the ears are to the ^{sides of y.^e} pelvis the forehead being to the Sacrum: but whether the forehead is to the Sacrum or Pubis you can feel the ears, so y.^e application of the Instrument will be very easy when y.^e forceps are applied, you are to lock them and observe whether y.^e angle made by their crossing is situated in regard to the head. This should be immediately under the vertex the part where the hair diverges, The forceps should pass as much at right angles to the Brim of y.^e Pelvis as possible, if y.^e handles are in y.^e middle of the lower opening y.^e points will be against the Sacrum, and thus we shall have a very unfavourable hold of the Childs Head therefore we should after locking y.^e forceps, applied loosely on the Head, shove the handles as far back as y.^e Perineum will admit of, they should be behind y.^e lesser fonticell, and before the greater, after the Instrument is fixed we must consider y.^e situation of y.^e head, & to extract it we must make y.^e progress of y.^e natural Labour our standard, altho' the Woman has not pains sufficient to

to expell the Child, yet which commonly, has some, we should therefore draw down in time of pain and assist when the pain goes off. — who have such a command of y.^e head with the forceps y.^e we can almost get it out in any direction by the dint of pulling, but by so doing we do infinite mischief, the forceps being applied and locked you pull towards you till the Occiput is pushed out, then you pull always over the Womans Belly; — the most favourable situation of y.^e woman in this case should be half sitting half lying. In this position a sheet comes from y.^e womans body to your thighs, which falling down on each side of you, covers you all round, you may thus under cover apply y.^e forceps without y.^e woman or any body in the room knowing it, take them warily out of your pocket lubricating y.^e Blades with Pomatum, and place one on each side the woman. — In introducing them you must remember to introduce y.^e first blade from your left hand to your right, and take care not to entangle of the Pelvis in locking them which would give great pain to the woman: — In extracting with the forceps. if it is y.^e womans first Child, observe to pull very slowly and gradually or you do a great deal of mischief, when the head comes to push out the Perineum, if the pains are any way strong, I would advise you to leave the rest to nature. for now the head has got so far beyond the bones, its very probably the pains may be sufficient to expell it I would never chase the forceps without telling some one in the room my intention by which you'll please her, and endeavour to comfort the woman to assist you as much as possible very seldom have we occasion to use

the forceps in this case. except the Woman is very weak or has violent floodings. the next case is one Ear to the Pubis the other to the Sacrum, in this case the application of the forceps is more difficult than the former, in this position we can readily feel one Ear, viz, that to the pubis, tho' we cannot the other, when we pass up a blade by the Pubis, we should by no means bring the handles forward as people are apt to do, for then we shall be pushing y^e point into the head, but if we keep the handle in the same direction as when at first introduced it will of it self take the little curve that is necessary. to introduce the other by the Sacrum requires still more Art, you must introduce the blade along two fingers, which can but pass a little way, when the point gets beyond them you must push up the handle; keeping y^e points touching the head if you should meet with any resistance draw back y^e instrument. then by keeping the point applied to y^e head, and introduce it gently, you will easily pass the Os Uteri, and then the blade will easily pass up of it self, we must then ~~on~~ on y^e flat side the face is before we attempt extracting it, which is discovered by the smooth part of the Ear, the reason for applying the forceps in this case is the unfavourable situation of the Childs Head which fall down before the spine of the Pelvis, an unless the Head is very small, or the pelvis long it cannot pass in this situation, after the application of the forceps, we are to turn the head into a more favourable situation, which should be as in the same as in a Natural labour when the forceps are applied if the handle ^{not} ~~is~~ horizontal move to that direction as the Woman lies on her side and likewise keep y^e hand far back

Lecture 12th

In turning we ought to keep the handles as far back as possible, by which means we keep the occiput lower down after you have turn'd it examine for the occiput if at the Pelvis, and the thicker part

part before the cartilage pull circularly out, if not you pull on till you bring it so, and then pull it up circularly, before this time we shall force the occiput behind the cartilage instead of getting it below. We must observe many little circumstances to apply & extract with forceps properly and dexterously, suppose a case where the occiput lies to the sacrum and the face forwards; here as the ears are to the sides of the Pelvis. The forceps is to be applied as when the face is to the sacrum, if in this case you cannot feel enough of the ears to distinguish the smooth and cartilaginous parts, which as the ears lie near the sacrum, then when the face is to the sacrum consequently an on or out of your reach, you will feel the long fontanel here we must extract the head as it lies, for if we attempt to turn it so as to throw the face to the sacrum, as the Body is fixt by contraction of the Uterus, we shall very probably dislocate the neck, In general this case terminates naturally without any extraordinary assistance, but the forceps are sometimes necessary, as when the Woman is very weak on having a great Flooding &c. as you draw the head along y^e Occiput comes over the perineum, hence the head falls Back instead of rising forwards. because there is much greater distance between the Vertex and Chin than between the Vertex and occiput. If y^e Head is in the diagonal, only one eighth of a turn is requisite, there is only one other situation of the head were the forceps can be applied that is the face presenting and the occiput thrown back upon y^e Shoulders. Now we feel the Eyes, Nose &c. and may get a finger into the Mouth Doct^r Smellie preadvise turning, if you perceive the presentation before the head has got into the pelvis. but I would never think of it, for in common the head will pass without any extraordinary

help; when the head is in the Pelvis and y.^e pains sufficient
 tis then time enough to employ any extraordinary assistance
 and I had rather use the forceps in this case, than turn the Child
 as it can be done with more safety to y.^e Woman & with as much
 to the Child; the only inconvenience of letting the head come away
 in this situation if it can be called any is that the Childs Head
 tilts backwards, but after a little while it becomes upright so that
 it may rather be an advantage, in this case after you have
 made your Quarter turn, the handles of your forceps will be
 altered that is raised; if your forceps are properly applied & don't
 slip in turning, you must always throw the handles to that
 side where the Chin is, & by that means the Blades will be fixt
 on the Parietal bones, and you will have firm hold of y.^e head
 If you do not observe this you will not be able to turn the Child
 under the Pubis, for if you throw the handles to the perineum as
 is proper in other Cases where the forceps are applied, you will
 never get a firm hold of the head, and they will slip off when you
 begin to turn, in this Case the handles of the forceps when pro-
 =perly applied are parallel to the Womans belly, but after you
 have made the turn, they are raised from it almost at right
 angles. -----

Lecture 13.th

In those instances when the head is not got into the
 Pelvis, you had better turn the Child, than to attempt to apply
 the forceps, in such Cases this application would be very precarious
 When the Woman is but seven Month gone or less, the Childs
 Head

head will put on any shape, the bones being so yielding. but the child will be destroyed, from the compression of a narrow pelvis you may know when y^e head is dropsical by there being a fingers breadth or more between the Bones. To know whether the Pelvis be distorted or not endeavour to feel the bones of the Sacrum & examine if the Angle of the Pubis be acute, different Methods have been proposed to assist when the pelvis is distorted or the head dropsical but they all terminated to destroy the Child, which cannot possibly be avoided as the head must be lapsed. Various Methods have been proposed, for opening and extracting the head, but the Scissors for opening are preferable to the rest, and then to extract with the Crotchet, — when you have opened the head you must laseen it before you attempt to extract it, to do which the head resting on the brim of the pelvis you feel a suture with two of your fingers, between which you pass the point of your Scissors up to the head and plunge them into the suture up to their rests and open them which makes a large division in the head ~~up~~ you then shut them, and then pushes them on above the rests within the Skull, now open them again and turn them about, by which means you destroy the fixture of the brain, you then with draw the scissors, & with your fingers attempt to scoop out the brain, but if you don't succeed with your fingers you will very readily with the Crotchet. — The Crotchet has been advised to be applied different ways, but my Method is to introduce the point of the Crotchet into the opening made by the Scissors. hook on the

bone, and make a resistance with your fingers on the outside and attend to the proper direction of pulling, and pull in time of pain, if the Crotchet slips apply it to the other side, I always prefer the curved Crotchet. after the brain is evacuated a couple of fingers within will be sufficient for the extraction of the head. y^e brains being discharged the bones will collapse and the head elongated by the force applied, being below the resistance, whereas when the Crotchet is applied on the outside of the head you fix it above the Brim, and above the resistance which will tend to flatten the bone. the curved scissor I have proposed, as they will answer in all cases were the ^{straight} small ones will, and in some were they will not a simple opening of the head will be sufficient in a dropsical head and the pelvis well formed, as by a simple opening y^e water will be evacuated and the head loosened. when the Body is Delivered first and the head cannot pass, we would rather choose to bring the head away with the Body, then to operate thereon, here we can not open the head with y^e straight scissors, but we can readily with the curved ones. Doct^r Rhinzie advises us to extract the head by fixing the Crotchet on the outside, but in cases of a distorted Pelvis the head always rests on the brim of the Pelvis, consequently out of your reach so as to make it impossible to get the Crotchet through the bones of the skull, and by fixing it to the scalp the Instrument will certainly tear through the integuments as soon as you attempt to pull down, you will do great mischief to the Mother, besides I do assert that by introducing the Crotchet up beyond

beyond your reach you are apt to hook and lacerate the Uterus, I therefore advise you never to apply the Crutch, upon the external side of the head, when the head is left in the Uterus after the Body is extracted, you must not attempt to open the head till it is fixed in the Pelvis, or if it cannot enter the Pelvis it will be fixt on the Brain and won't move on the application of the Scissors, and when as if you attempt to extract the head immediately after the body is brought away, the head will not retract from the Scissors on applying them to it, after the head is opened and the brain extracted, the bones will collapse & the head will generally be expelled by the pains, therefore we ought to wait this time, before we apply the Crutch for at least the head will be brought much lower, and the Crutch applied with much more safety.

Lecture 14th

The third case for Prematural Labour, is when the Child is Delivered by the Feet. We divide into three Species, First where one or both feet present Knees or Breech. Second where the Child lies across the Uterus, the Head and Shoulders being as far from the Os ternum, as the legs and feet. Thirdly when the Head and Shoulder are next the Os Uteri. the part most troublesome in extracting by the feet will be the head of the Child therefore for that to come out easily you should have a proper situation, i.e. the face should be at that juncture between the Sacrum and Pubis, and the Occiput forward, of any part that is most liable to catch on the Brim of the Pelvis, therefore it should be thrown

backwards. In the first Species where both feet presents, we must consider the time, for a foot may appear, and the Os Uterus, be very ridged, you must then allow the labour to go on, till it is sufficiently dilated, for the Children are generally lost by delivering too soon, therefore we must make it a rule to wait as long as we possibly can to give time for the parts to dilate, when the feet are got out you must grasp them together with a cloth then draw down moving from leg to leg and slip up your hand as they advance, to the parts next the Os Externum as soon as the Thighs are got out, you consider the situation of the body, & change it if necessary, the Arms come easily out of themselves for the most part, if they don't you may hook a finger into the Elbow depress the Scapula in order to get out the head, & feel for its situation if the Chin is not within the Pelvis, Introduce a finger into y. mouth and pull a little by that and the body, the Chin is to be felt for by passing your hand up when you have got the Body out as far as y. breast there is no difficulty in extracting the head after it is advanced into the Pelvis, — the great advantage in delivering in *Position naturalis* & *caeca* with the Chin towards the Sacrum, is that of entering of y. Pelvis, the longest axis of the Child's head will always present itself to the longest axis of the Sacrum and Chin and the brim of the Pelvis when in the diagonal the Chin being at the juncture of the Pelvis, these parts are not acute as it is in the fore part, but is round & made smooth by the Muscles, which prevents the Chin hooking on this part. But on the fore part of the os Pubis being quite sharp, and the Chin going off from the Neck at the right angle the head generally sticks when the Chin presents forwards

There is no indicating Pictur natural ^{labours} ~~cases~~ from the pains, if you are not able to feel the Child before the Membranes are broke, you are not to conclude from thence that it will be a Pictur natural birth, For it is only on indication that there is a large quantity of water: Early in Labour you sometimes feel a foot or a knee and on the Membranes break you readily find one or both feet. there is no great Art in distinguishing a foot from a hand. the length of the fingers compared to the Toes will readily determine them. — Before you attempt to deliver, you must attend to many circumstances and particularly to the laxity or rigidity of the parts, & state of the Os Tinea. If you attempt to deliver while the parts are ridged & the Os Uterus small you will in all probability kill the Child, and sometimes the Mother for you may easily get out the Body as the different parts of it are soft and will yield to any shape, by elongating themselves & compression & extraction force to them. but when you come to the head it being a greater circumference & not so pliable will stick and if much force is made use of, will be separated from the Body, and if the head at any rate remains too long in the Uterus after the Body is extracted the Child will be destroyed by the navel string being compress'd and the Circulation stop'd. Doct. Osme relates the Case of a Gentleman, who not long ago begun the practice of Midwifery, the first case he was sent for proved a Cross Birth he turned the Child and brought down the feet but being so much in a hurry, as is often the case with young Beginners if they proceed to deliver without giving time, for the parts to relax and dilate, however he brought down the Body, & flatter'd him

self with a safe and quick delivery, but in attempting to bring out
 the head it separated from the vertebra which confused him so much
 that he laid down the child took up his hat and went away leaving
 the head in the Pelvis and sent another person to extract it and
 being quite sick at his bad success, determined never to practice
 more. If the Belly of the Child should be compressed on y.^e Oostrea
 & part of the Navel string should come down, you should turn
 and alter the position of the Child else it will be destroyed, by
 the compression of the navel string, when the Pelvis is distorted
 and narrow, and the Childs head long, we should always bring it away
 with y.^e body that we are under the necessity of opening the Head
 therefore after the head comes without the vagina & the head is
 thoroughly fixt in the Pelvis, for it seldom happens the Pelvis
 is so narrow, but it will admit the narrow part of y.^e Head into it,
 the projection of the parietal bones resting on the parts that prevents
 its going any longer. as soon as the head is got so low that you
 can feel one Ear behind the Pubis, the other behind the Sacrum
 you must then be satisfied that the head cannot be brought away
 without opening it, make one opening behind the Ear on that
 side next the Sacrum with the Crochet for here you cannot use y.^e
 Scissors conveniently, but the Curve of the Crochet answering to the
 curve of the sacrum you can with great ease and safety enter it
 behind y.^e Ear, for in all Children you will easily feel the opening
 where the occiput joins the os parietalia & os Temporis and here y.^e
 Crochet will have a good hold of the Bones of the Skull.

Lecture 16.th

When the Breech presents it is not to be distinguished readily from the head till the Os Uterus is pretty well relaxed and the Membranes broke, then you easily know it - the Child in general will pass by the Breech, as the Breech is not so large as the Head, & softer, & when y.^e Breech get as low as the Os Coccygis press on the Perinaeum the Belly to the Back of the Mother, it in general sticks, the thigh bones being straight & therefore not favouring the half round turn, you can assist the Woman by getting a finger into y.^e Groin & pull down in time of pain, If we can feel the tuberosities of y.^e Ischia we know where to find the groins, pass y.^e finger along without them, you will probably feel the Anus, then consider where the parts of Generation are, which will inform you ^{to} what side the fore parts of the Child are - you must use the Method of hooking the finger into the groin & assist in time of pain pressing a finger on the opposite side; it may happen your finger cannot reach the groin, in this case the blunt hook is to supply its place, pass it up flat till you reach the groin, then turn & pull down as with your finger till within your reach; tis very seldom that you have occasion to use the hook, if y.^e Woman is standing for I have known two or three pains make the Child come forwards, more than when a dozen when y.^e Woman is lying along - Smellies Blunt hook needs some improvements the hook should not be half as long, it should have a rising in the middle & should be covered with leather; after you have applied the hook as you draw down support the other side with

the other hand;— when the Breech pushes down without the Os externum, so that you can get hold of it, you then take a firm hold of it & the thighs together and pull down, the Legs drop out we should never endeavour to pull down the Legs, for if you attempt it by pulling down the thighs, you will most certainly Fracture or dislocate them, when the Breech does not advance into the pelvis, its not owing to its size but to its oblique situation, when you get the Breech out far enough to lay hold of it with a cloth; if the fore part of the Child do not lay to the back of y.^e Mother then turn it as you draw down, always remembering to turn to that side which is most inclined.

Lecture 17th.

The back of the Child presenting to the Brim of the Pelvis will readily be felt by the spine, if the spine runs from side to side, then we know that the breech is to one side y.^e head to the other, we should know on which side the Breech lies if possible before we introduce a hand, as we can immediately pass it up to the feet, if in any case you are at a loss & cannot know till y.^e hand is pass'd up into the Uterus, but when the Breech presents you may always know, the Spinal processes are more distinct towards the Breech, and more obscure towards the shoulders, another way to determine this is getting a finger a little to one side of the spine, where we shall feel y.^e ribs, which run at oblique angles from the spine, if they go off pointing towards the right side, the Breech is lying to y.^e side

In

in regard to the time of turning, if the Membranes break early in labour & the Os Pince is hard & rigid, you must wait as in a natural labour till the parts are relaxed and dilated, in general the legs are bent upon the Thighs so that if the hand slide up upon the Breech, and then the fingers dilated you will readily feel a foot when one of the legs is brought into the Pelvis & the other entering, it become one of the cases before described, in all cases of turning y.^e side position for the Woman is best & you should be on your Knees, take the opportunity of turning the Child when y.^e Uterus is on the stretch. —

Lecture 8.th

When the superior parts present, it is imagined that the turning of the Child will be more ~~off~~ troublesome than in any of the other cases; — when the Arm presents Doct.^r Smellie advises to push up the superior parts, however when you attempt this you push the whole body up, and is thereby in great danger of bursting the Womb, therefore it is very wrong treatment; I know an instance of this, not long ago: there is very little ~~—~~ difference in turning when an Arm presents, then any other position: — when the fore arm is bent upon the Arm, you bring it down, as by that means you enlarge the passage for your hand; we need not trouble ourselves to turn the Arm, or to take it off, which is never to be practiced you must pass your hand along the breast and fore part in search of the feet, upon bringing down a foot y.^e shoulder slips into its old position, if you cannot bring a foot into the Vagina, fix a

noose to the Ankle, but sometimes it will happen that you can
 not bring it low enough to do this, one Leg being forced over the
 other, when this happens do not insist of bringing down that,
 but go in search of the other, often the bulk of your hand shoves
 the Shoulders so far away that the Breech slips down immediately
 here you have only to bring down the feet. Sometimes the Uterus
 is so very much contracted that you cannot introduce your
 hands, Give the Woman gutt xxx vel xxx of Sinct Theriac. & as
 soon as she becomes sleepy or heavy, you may pass your hand
 the violent contraction of the Uterus will be taken off. It
 sometimes happens that the Uterus contracts like an hour
 glass, when you find it difficult to introduce your hand up
 to the Uterus, observe to wait till the woman is free from pain
 for then it is not near so much contracted. I would always
 advise you to give an opiate and never despair, for every at-
 tempt makes the next more likely to succeed, but always take
 care to use no violence but do it gradatim & don't shove up
 the Uterus in raising the hand, In observing this you will
 at least succeed without any danger to the Woman or Child
 for there is no danger in carrying your hand to the Fundus
 Uteri; if you only take care not to shove the Child up: I've
 known an instance where the Chin has hook'd on the Sacra
 Sciatic Ligament, near the spine of the Oscheum and the
 midwife pulling down without altering the situation dis-
 located the Child's neck, after I had altered the situation of it,
 the Head came readily down but y^e Child was dead, when
 the

The Body comes away leaving the head in the Uterus with some of the Vertebrae annex'd to it & in the same situation as when the Body was join'd to it, you cannot as it lies introduce the Scissors or Crochet, you must therefore turn the head; so that the forehead may present to the Vagina and then you may easily enter the scissors thro' the Suture above the nose and proceed as before directed.

Lecture 19.th

As soon as you have brought away the Child you apply a warm cloth to the external parts, and in about 10 or 15 minutes you place the cloth under her & extract the Placenta, move all at once, after the woman is dry, you apply a napkin in form of a roller around y^e belly with a warm cloth under it then a short coat with a broad band is apply'd tight round over the shift, & over all a Bedgown, but perhaps the woman may lay an hour, before you can remove her — before you wash your hands, call for the Placenta, & when the nurse or some other person that it is entire; large clots of blood will sometimes come away two or three Days after; which is taken by some to be the Placenta or part of it. It is never the case, I believe that we are oblig'd to leave the Placenta behind but some of the Membranes may be left. If so you had better say that some of the skirts are left behind. but that they will come away without detriment, then that the good woman should afterwards find out. After Labour, common practice amongst both rich & poor is to give Nutmeg and Sugar; if she chews any

Liquor with it let her have a little Brandy & water or wine and water warm, if the woman has been much fatigued and is pretty warm and dry she should be permitted to be still an hour & a half; — we should always stay in the house till the Woman is put to rest — least by moving her a flooding be occasioned. It is the Nurses business to dress the Child, which is sometimes covered with a white mucus, the body should be first rubb'd over with Pomatum, & then washed off with wine & water or Brandy & water. If the Woman is delivered in her Body cloaths, she must be dressed in a Chair; if without in bed by removing her to the clean side, as to the woman's diet in the Month, Fish is objected to as it is a Laxative. Flesh, Chicken Broth, Veal or Mutton Broth Beef Tea & Raudie white & brown the patient may be indulged for the first and second day but on the third we should refrain from solid food on account of the Milk fever, the drinks should be Balm Tea, Mint Tea, and Barley water; in regard to Medicines we should prescribe something Laxative & promoting perspiration as a draught with *Sperma ceti* ʒij Pulv. Contray. Comp. gr. ʒv Aq. Nuc. Mosch. ʒiij with a little Syrup & Sexta quaque Hora sumend. If there are Hysteric symptoms Castor may be given, rather in Boluses than Draughts, tho' their palates should be considered. if the good Woman think it necessary that we should order something at this time for to purge the Child of the Meconion give a Teaspoonful of Ol. Amygd. S. Syr. Rosae solutis aa a p.

for

for a Dose, or if the Child be strong a few grains of Pulv. Rhei added to it will answer the purpose, the first complaint generally of a Woman after delivery are after pains; tho' Women of their first Children have fewer of those than others, the more Children a Woman has had. Ceteris paribus the greater will be her after pains, they are rarely if ever mortal, the time of their coming is Vague, sometimes immediately after delivery at others not till two or three hours after, after pains come on so commonly that they are seldom regarded unless Violent, they seldom last longer than 12 or 15 hours, tho' sometimes they continue two or three Days, we must endeavour to relieve the Woman by keeping her warm & letting her drink plentifully to keep up perspiration; the cause of them is generally clotted Blood, if you can procure no relief from this Method give Opium & after the second day Clysters will be usefull or a fomentation after 4 or 5 days, the Lochia loses its red colour & becomes green, which is called g. Green waters, & continues till the Eighteenth or twentieth Day; this discharge more or less is of great service; Women of their first Child. & those that suckle have a less quantity. these green waters are very often of a disagreeable smell, sometimes the green waters will happen on the second or third day, and sometimes the red will break out on the fourth or fifth and continue a Day or two which is not uncommon. We must form our judgment of a Suppression or immoderate flux of the Lochia from symptoms. If there is the least

suppression of them, the woman will be feverish, here you
 must Bleed her, give Glysters Tooment the Abdomen & keep up
 Perspiration let her drink freely of small Liguors: If $\dot{y}^o$ Lochia
 flow in such quantities as to weaken the patient, we must
 begin with a weak Decoct. of Bark given in small quantities
 for a dose, then proceed to a common one Decoct. Cort. Peruv. with
 Elip: Vitriol, towards the third day the Milk fever comes on,
 and generally terminates in 12 or 15 hours by the secretion
 of a great quantity of Milk, if it is stoppt by the Breast it usually
 goes off by profuse sweats, sometimes by Urine wherein may
 be seen Milk, sometimes by loose stools & sometimes by glan-
 =dular Imputumations, promotes from the beginning an easy
 secretion of Milk by the nipples, a skin dressed with $\dot{y}^o$ Wool on
 it is the best application to be applied to the Breast, or in
 lieu of that flannell, when the Milk fever is raised high the
 Breast will be very painfull, here we must endeavour to procure
 a discharge from the Breasts; after the fever is gone off the Woman
 gathers strength every Day, when there is a soreness of the parts
 we only apply a little Lard or Pomatum on a Cloth daily if
 the Prineum should be lacerated, apply a poultice for a day
 or two, & dress the Wound with lint & a little Cerate, & this will
 be sufficient in slight Lacerations, but when they extend thro'
 to the Anus & rectum they are very bad Cases & can not be
 relieved, but these seldom happen, sometimes there may
 be.

be a swelling & the patient cannot make water for a day
 or two, you must apply a poultice and pass up y^e Catheter
 If the Bladder is inflamed by the pressure of the head lying
 along upon it, when in the Pelvis you must use all the
 resolving methods you can think off in pretermatural
 labours perhaps a leg or an Arm, may be broke in turn.
 the Child, these will soon unite, but if the thigh is broke
 it is more difficult to keep in a proper situation, the
 scalp sometimes is much swell'd, but it will disappear in
 a few days; you may foment it with a little Brandy or
 with wine & Water; & if it should suppurate it is to be open'd
 If the Anus is imperforated you must open it also the
 Urethra if there is no passages; Children in the Month
 often have the red Gum, if any thing is required Purges
 with Rhubarb, the Thrush is more dangerous, often cover
 the internal parts of the Mouth, Throat &c. with white specks
 keep the body open with Rhubarb, & clean the Mouth by rubbing
 of the Sponges & give absorbents as a tea spoonful of Chalk
 Tuber frequently if the Child is costive give a Manna
 Magnesia All. &c. If the purging happens we should not check
 it at once, Changing the food wth often cure the patient
 of y^e Complaint: as from pap to chicken Broth &c. towards the
 latter end of the month if the woman does not suckle her
 Child she will expect you to order her some physic, you
 may give her Infus. Senna, Manna, Sal. Glauc. Tinct. Cardim.
 &c.

in choosing a Nurse the younger the Milk the better but we would not object to a nurse whose milk was four or five Months old; If nine or ten months old we ought to object to it; if a Nurse has her Courses we would object it.

Lecture 20th on Miscarriages

Miscarriages most commonly happen about the Third Sixth or seventh Month, the latter the most dangerous, from the flooding that happens which is a very serious affair; when a Woman is two or three Months gone & is seized with a flooding if you are called to her assistance in time you may frequently prevent a Miscarriage by Bleeding, & strongents, giving rest & keeping her in bed but don't keep her body too warm with a load of Bed cloaths, If the flooding continues she will in all probability Miscarry, and then you must leave it to nature, for you can be of little or no assistance in extracting the Child, as the os Sine at that time is very rigid & sometimes contracted the placenta will come away in 24 hours after the Child & sometimes it will be six or seven days, if you feel the placenta protruding thro the Orifice of the Vagina, you may introduce your finger thro between it and the Orifice, & gently force it downwards, but as it is apt to tear, you must as it gives way press on different parts, tho' after you will generally be disappointed, therefore you must tell her not to be uneasy for that will come away of itself in a little time, for by remaining in the Uterus it will melt

melt down & be discharged in a putrid state without any
 detriment to the Woman; when a Woman is seven or eight ^{the} months
 gone & is seized with a flooding, it becomes a dangerous case
 as it shew that a large portion of the Placenta is separated from
 the Uterus, & if Labour pains do not come on soon, the Wo-
 -man will be exhausted by the loss of Blood; If the pains come
 on in time the case will terminate happily, for the flooding
 don't continue from the Uterus being stretched ^{up} for want
 of contraction, for we see upon what it contains, & by con-
 -tracting itself upon the Child very closely, the diameter of the
 vessels are ligened, & being squeez'd against a hard body their
 orifice stops & this is most probably done by the Effect of Labour
 pains, therefore all we can do is to endeavour to bring on
 these pains, for whilst the Uterus remains in a relaxed state
 the flooding will never continue, we must introduce a
 finger into y^e. Os Uteri and press on it coast to excite a stimulus
 and by doing this often, at the same time pressing on the
 Perineum, the pains will be brought on gradually, y^e.
 flooding will decrease the orifice will relax & the Membranes
 will begin to bag, & we are now to proceed as circumstances
 point out; Never attempt to Deliver as recommended
 by many, by introducing first one then two & at last four
 fingers, or the whole hand, & to deliver at once, all we ought
 to do is to assist nature in bringing on Labour pains by
 gently press. on those parts, I have known several instances
 where after the operation has been, too introduce their hands
 (in these cases that by being too precipitate in Proceeding

immediately to turn and deliver, the Woman has perished
I never knew a case of this kind thus treated but that the
woman died, some during the operation, some soon di^a after.

Lecture 21. of the

Symptoms of pregnancy & method of reckoning

The symptoms of pregnancy are a suppression or an irregular
flux of the Menstrues, the breasts are enlarged the nipples are livid,
rugged & more protuberant than Natural; the Areolae more
dark or livid, & more conspicuous, she has a sickness at her
Stomach & Vomiting especially in a morning, attended
with a loss of appetite, or if she eats her breakfast Vomits it
up again and grows pale, about the fourth Month the sickness
& Vomiting goes off, or are so much abated, & when this happens
it is a great sign that the suppression of the Menstrues is owing
to pregnancy, & not to any morbid obstruction of them; some-
times the Menstrues will continue three or four Months
when this happens they are not regular, or is the evacuation
so great, nor continues so long as Naturally it does, a flow of
serum is frequent from the nipples, the belly now begins to swell
and the Uterus is heavier received from the touch with more
difficulty, & is lower down in the Pelvis, than in y^e Unimpregnated
state, In the fifth Month you can perceive the stretching of the
Uterus, & about this time the Uterus being increased, rises
about the Brim of the Pelvis consequently the os tinctae is
higher up than in the, second, third, or fourth Months, hence
a shortening of the Vagina is a sign of pregnancy in the first
Months

Women generally begin to reckon from the time of their
 Menstrues being obstructed. Some reckon from the time of the
 Childs Quickening, which generally happens about the beginning
 of the fourth Month; then they imagine they about six Months
 to go, others reckon from the time of Coition, which affects them
 more than at other times with pleasure & satiety, & at some
 particular Coitus, & the more experienced part of women reckon
 from this circumstance, but at the best it is an uncertain
 way of reckoning. when you are sent for to a Woman during her
 pregnancy & wants to be particular with regard to time, ask
 her when she was last out of order & when she perceived quick-
 ening, hence you may be pretty exact when you date your
 reckoning from the menues being suppressed, you may begin
 to reckon from the middle of the Month; rather than from the
 first or last part of it, as then you cannot be much in
 neither part of it; A Woman generally goes between Thirty-
 eight and Forty weeks, Thirty nine weeks then is y^e time
 we should allow for a Woman going from the first of her
 pregnancy to her delivery. If a Woman as miscarried once
 or twice they are very subject to it afterwards, particularly at the
 same time the first miscarried at. In the first Months of
 pregnancy she is plithoric & is affected with sickness reach^g
 & Vomiting, we should take away some Blood from her; for
 these symptoms will not be carried off so easily, as by Bleeding
 and her diet ought to be sparing and easy of digestion; some
 advise to take a Blood from them indiscriminately at y^e third
 or seventh Month as these are the times they most frequently

Miscarry at; but if there are no complaints at these times
 we would not bleed no sooner then at another time, but
 if a Woman has symptoms that requires bleeding, we would
 do it at any time of pregnancy, taking not above seven or
 eight ounces at Once, and if there is a necessity repeat it the
 next time rather than take more; If she is Costive give Len-
 =ient purgatives, such as Manna Rhubarb &c or if she as
 not had a stool for several days, a Glyster to soften the in-
 =durated faeces that is pent up in the rectum, before you give
 the Purgative, otherwise it will give her griping paines &
 uneasiness before it operates, and at last will discharge
 them at one stool instead of three or four, which by suddenly
 weakening the patient may bring on a Miscarriage, it
 sometimes happens that the rectum is so fill'd with harden-
 =ed faeces as not to be able to pass, & then the Faeces makes
 a sort of a small groove through them & will be continually
 passing & stimulating the patient to go to stool, an inst-
 =ance of this I lately met with, upon introducing my ~~finger~~
 hand into the Vagina I readily perceived the Rectum dis-
 =tended with indurated faeces, tho' there was a constant thin
 discharge, & upon injecting a Glyster the looseness & faeces were
 both removed, here then was a looseness proceeding from costiv-
 =ness, If the Woman has symptoms that indicate a Vomit
 to remove them we would not hesitate to give Specaccharum,
 she should never be tight laced nor wear high heeled shoes
 as there as been instances of women being thrown down

stairs by them & as Miscarried in consequence of the fall, she may use gentle exercise such as is most agreeable to her, tho' some are fond of keeping women confined in y^e house; during the greater part of pregnancy, if she happen to miscarry before, but this certainly is wrong, for the only time we would advise against any exercise, is at y^e period she miscarried before her mind should be kept serene Quiet & free from all violent passions; the diseases of pregnancy are rank'd under two classes, Viz. the disease that are owing to women being with child, as sickness, Vomiting &c. and those that may happen from any other cause, as the Lues Venerea &c. these happening in consequence of pregnancy may also be divided into two classes; those that come on in the earlier months are a plethora Vomiting, Vertigo; pain in the head & Loins difficulty in breathg as these symptoms are owing to a plethora, gentle evacuations are proper; those that happen in the latter end of pregnancy are distentions of the Uterus, which may produce various consequences & complaints, as Vomiting &c. by compressing the stomach & intestines here we can only palliate by ordering her to take food sparingly & easy of digestion and prescribe rest else the complaints cannot be carried off. The Piles are very common at this time of pregnancy if this is plethoric Bleed, & give any lenient purgative as Sulphur, Elect. Lenit &c. An Inflammation of the labia sometimes happens which should be carried off before Labour comes on, or there will be great danger of a Laceration, if Plethoric Bleed, keep the body

open & apply topical Fomentations and poultices, after the swelling is reduced, keeping on a Compress will generally prevent them swelling again; when the Leg and Swelled we can do very little, when the Veins are much distended if they'll submit to be kept in a Horizontal position & their Bodies kept open, it will be of great service; when the woman is in great pain from the motion of the Child, you may take away a little blood & give an Opiate, Those diseases happening independant of pregnancy as a Gonorrhoea. L. V. &c. are to be treated in the same manner as if not with Child, for if the constitution is good, you may even salivate in the fourth or fifth Month of pregnancy, as safely as if she was not pregnant but if she is seven or eight Months gone only palliate till after Delivery, & then salivate y^e Mother & let the Child suck at the same time which will cure both; in dropical Cases give gentle Cathartics; but not strong stimulating ones, for you can only palliate not cure till the weight is removed by Delivery & by giving strong & stimulating Medicines, you would endanger a Miscarriage, If there is a stone in the bladder, it ought to be extracted before delivery, otherwise it may be attended with very bad symptoms when Labour comes on, for by pressing against the Childs Head, it may cause a difficult Labour, and destroy the Child; - It is to be extracted rather by cutting. the dilating the Neck of the Bladder, as stretching too violently, generally brings a violent contusion, laceration inflammation & at length Mortification, an instance of which
fell

fell into any own observation Destroyed the Woman; If she won't permit the Stone to be extracted, you must as labour advances endeavour to raise the stone out of y.^e way of the Childs Head, as Doct. Smellie advises.

The Peculiarities of the Fetus.

In the Fetus we observe the Aorta or great trunk running up with its curvature making the aorta descendens; the Pulmonary Arterie is continued back & united ~~with~~ to the Aorta and forms what is called canalis Arteriosus which is ⁱⁿ the Adult state Ligamentous, and is quite obliterated, above the heart between the lobes of the lungs, is seated y.^e Thymus gland, which is continued up as far as y.^e Thyroid gland, is of a conglomerate figure and divided into two lobes (right & left) in the adult it is not to be found — the two Umbilical Arteries are branches from the internal iliacs. The Umbilical Vein enters into a figure of the Liver, before the Labulus Spigelii, and communicates with the left branch of the Vena Portarum, from this Union of the Umbilical Vein with the Vena Portarum, runs back the Ductus Venosus to the Vena Cava Hepatica, The Valvula Nobilis lies within the Auricle on the fore part of the cava inferior; on the circulation of y.^e Blood in the fetus. the Blood does not pass thro' the Lungs of the fetus, tis thought this part of y.^e circulation would be unnecessary, as the fetus at this time don't breath, y.^e manner of y.^e Blood circulating is effected by means of y.^e foramen Ovale & Arteria Arteriosa, the last becomes impervious when

when the fetus is two or three Months old but the foramen
Ovale will sometimes remain open at twenty Years & often
during life; the lungs of a Fetus are very small from their
never having breathed any air, but solid and thrown into wa-
ter sink to the bottom, it is found that air will be generated
in the lungs from Putrefaction between the Child & Mother
the spongy parts of placenta is supplied with blood from the
Mother, the Blood of the fetus is brought to the placenta
by the two Arteries, which is returned by the Vein, & is supposed
to undergo some considerable alteration, there is a constant
circulation kept up between the Mother & y^e spongy part of
the Placenta, some part of the Blood that is fit for Nutrition
is taken up by the fetus, and it is imagined by means of
absorption, tho' no Lymphatics have yet been discovered
upon the Placenta, upon dividing the navel string after
the ligature is made, there is never any considerable dis-
=charge of blood, which evidently proves that y^e Vessels of the
Mother & fetus do not communicate with each other, but are two
different systems of Vessels, Arteries & Veins, and that those peculiar
to y^e fetus do absorb, and carry to it some part of y^e Blood of y^e Mother

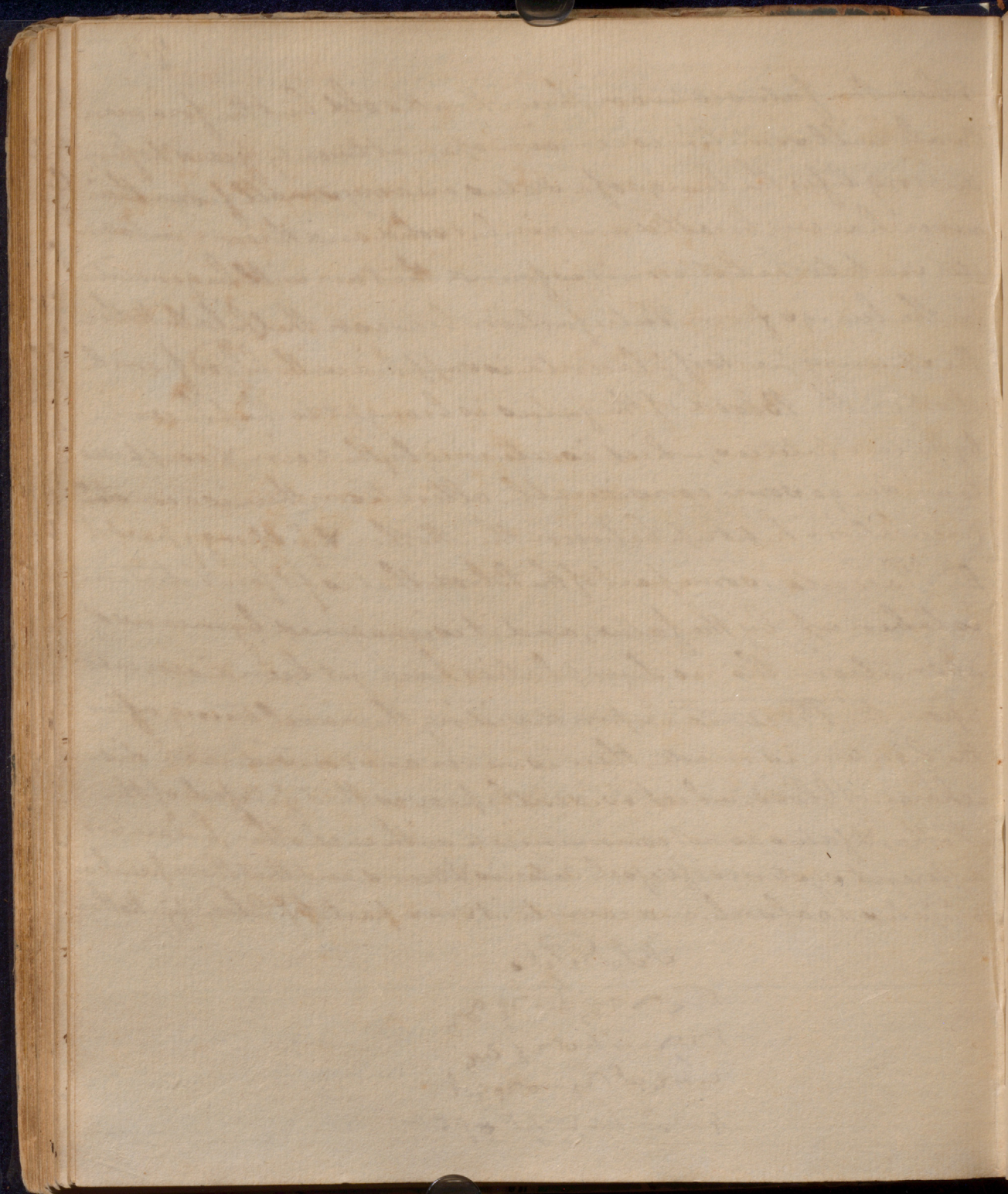
F. J. N. P. P.

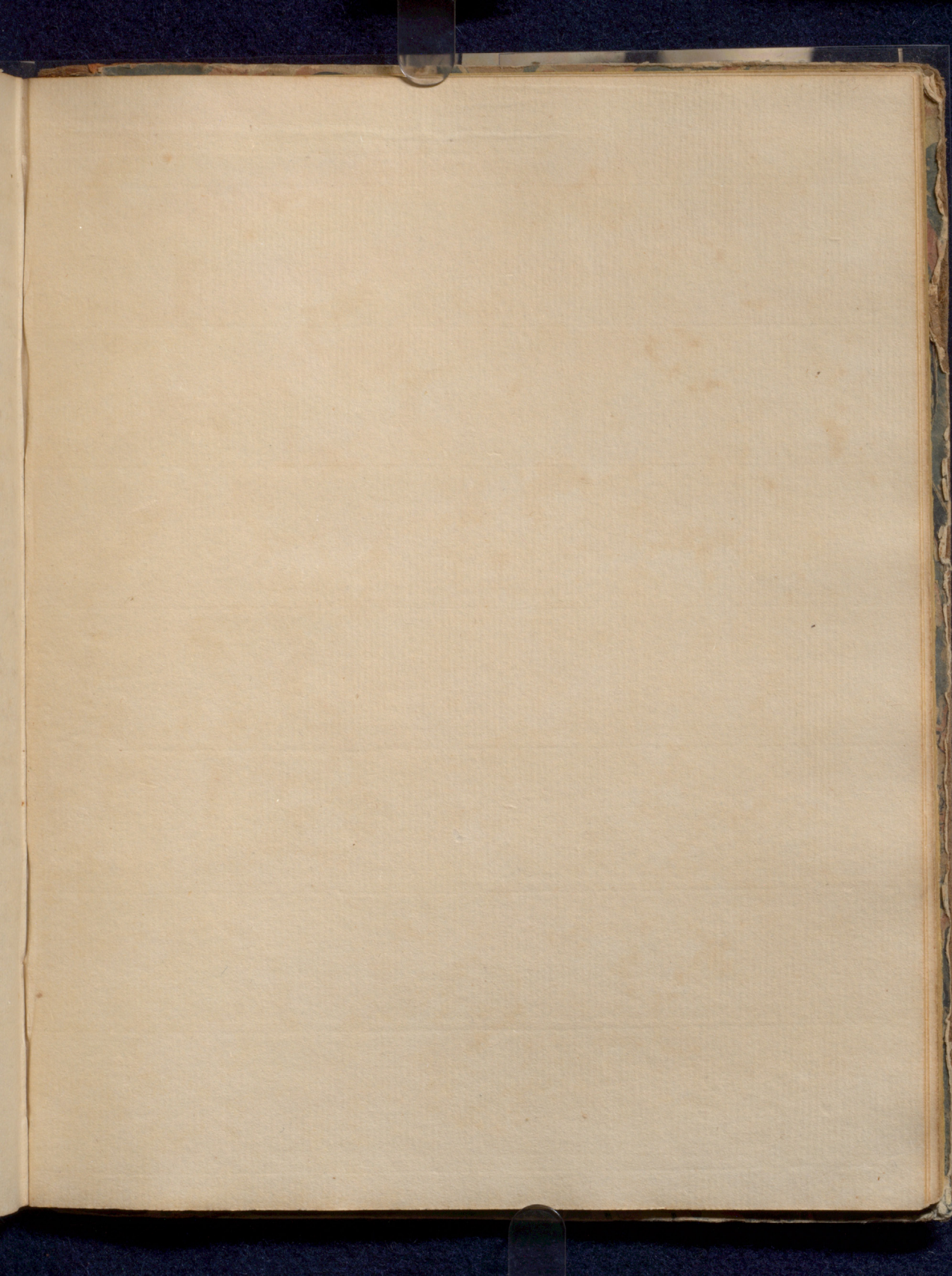
P- \ 773 L. 78 25

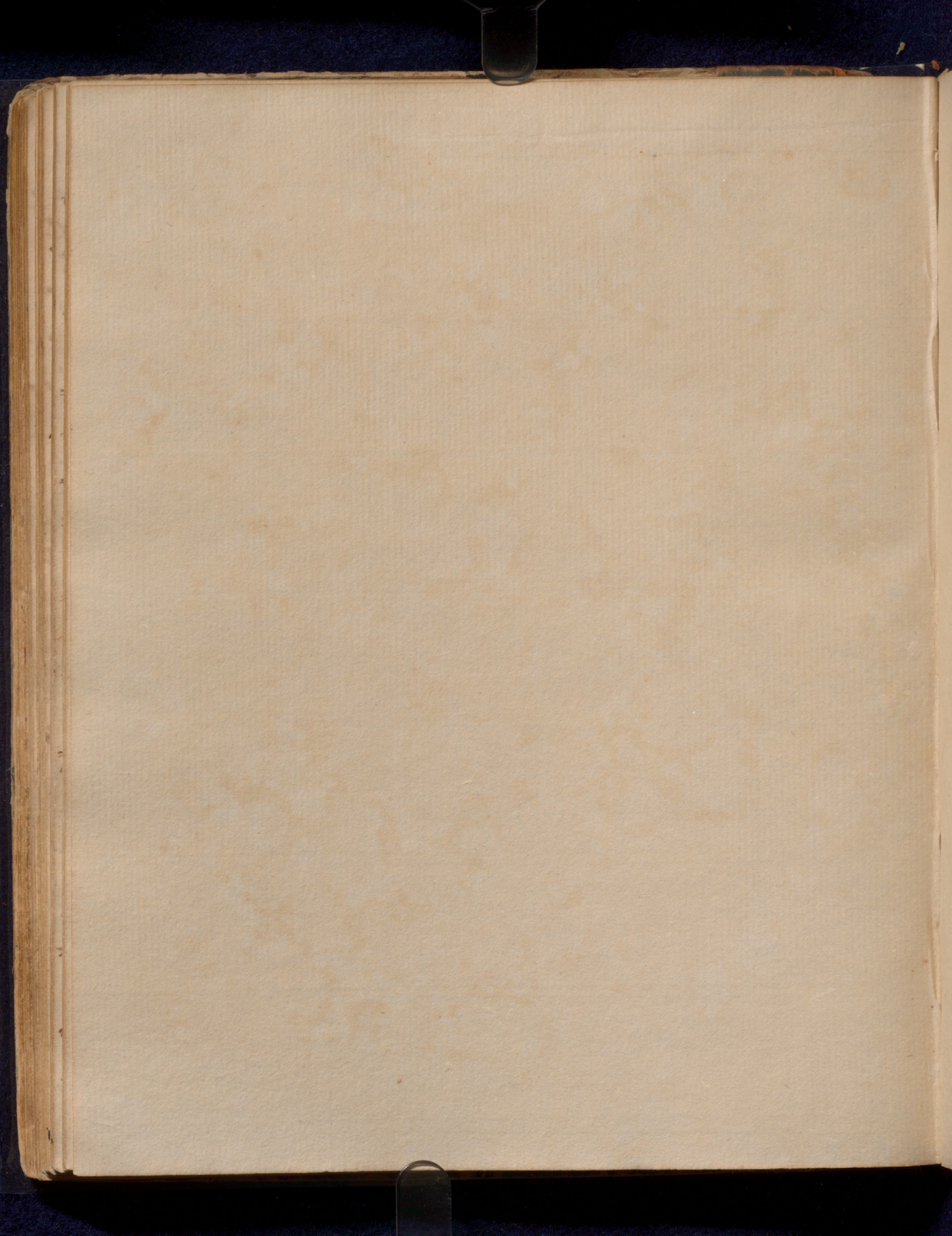
P7. \ → 4 5 7 6 25

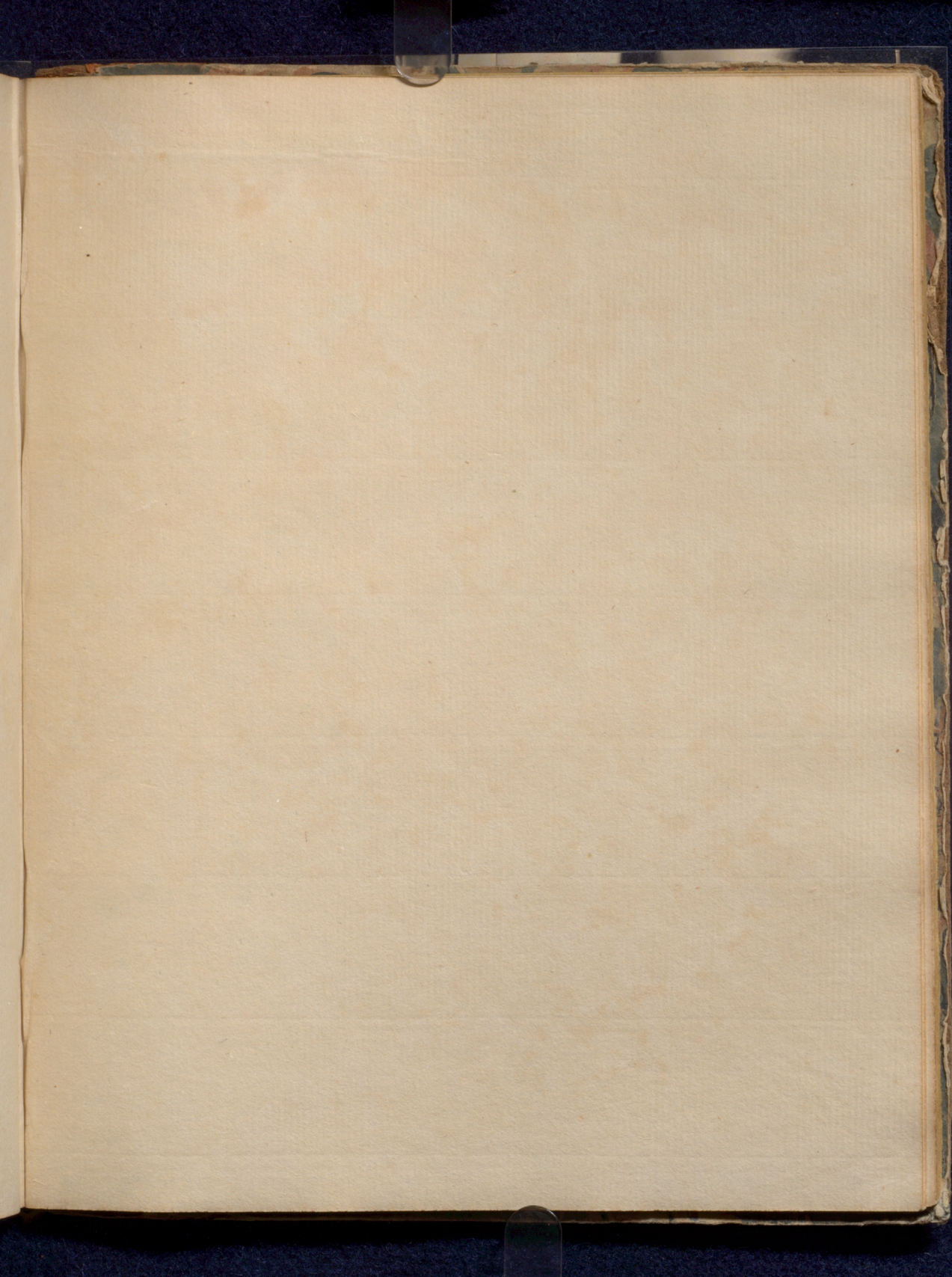
C Lx. w^r 7 2 0 7 9. 1

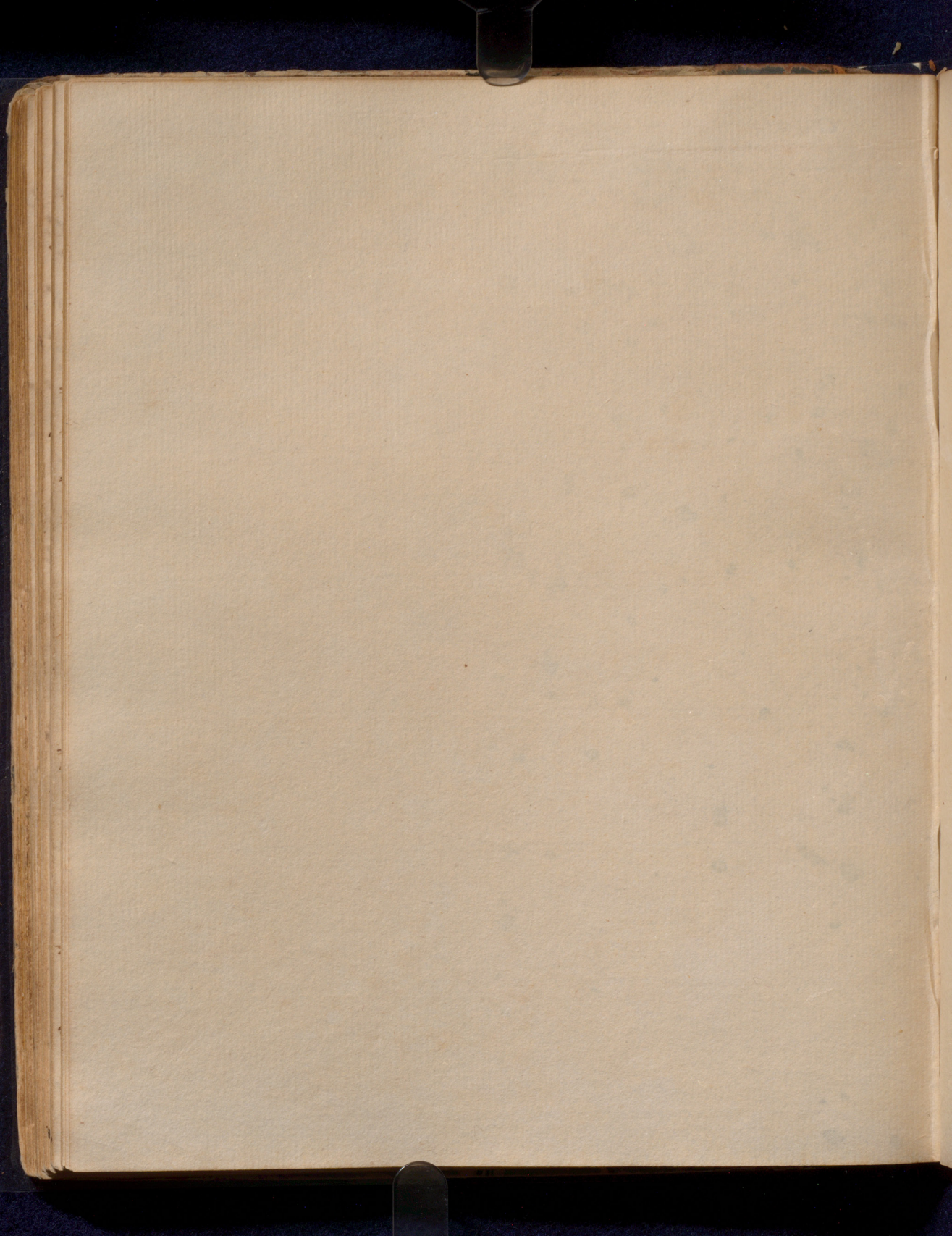
4 → 7 4 5 7 2 5 7 2

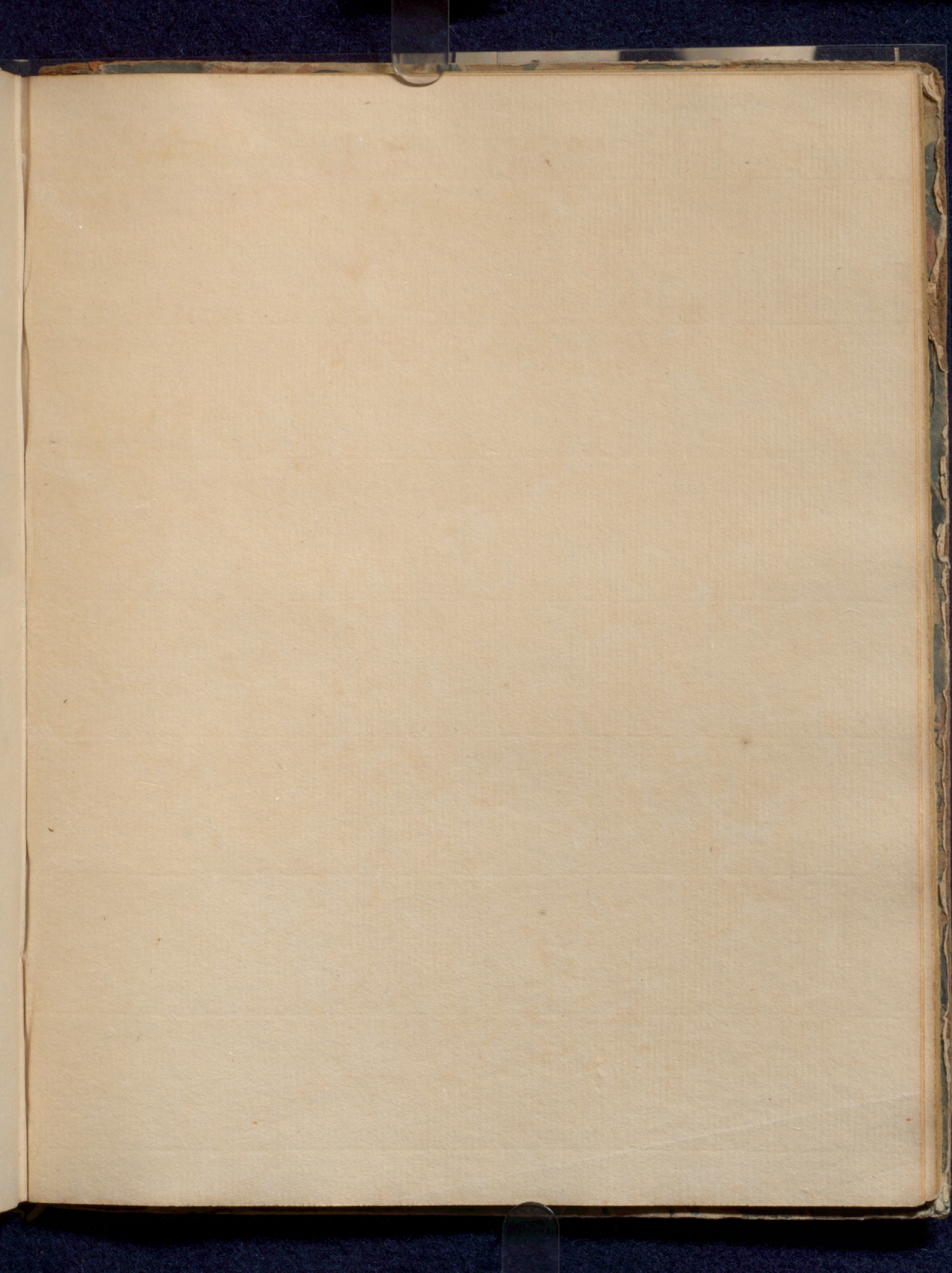


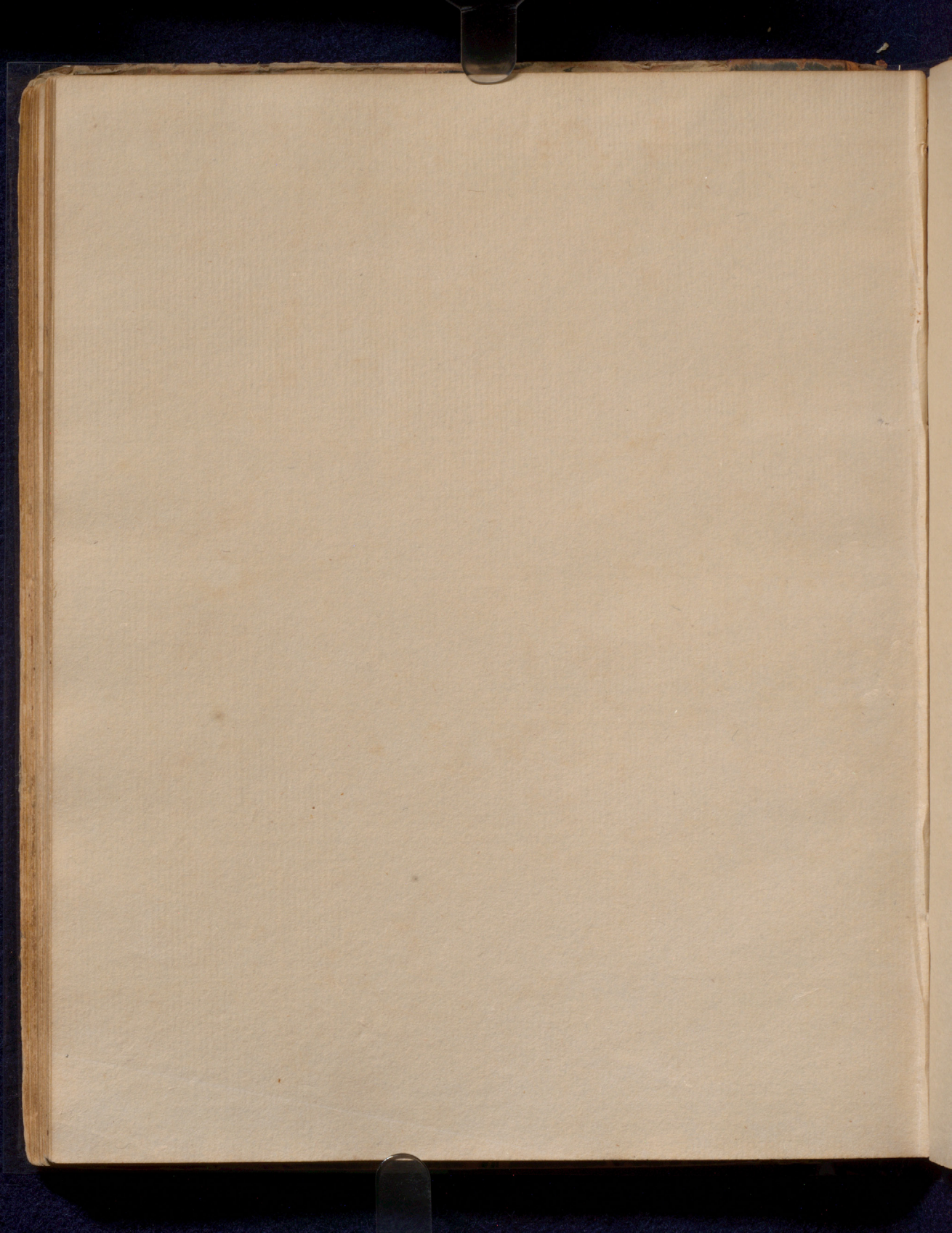


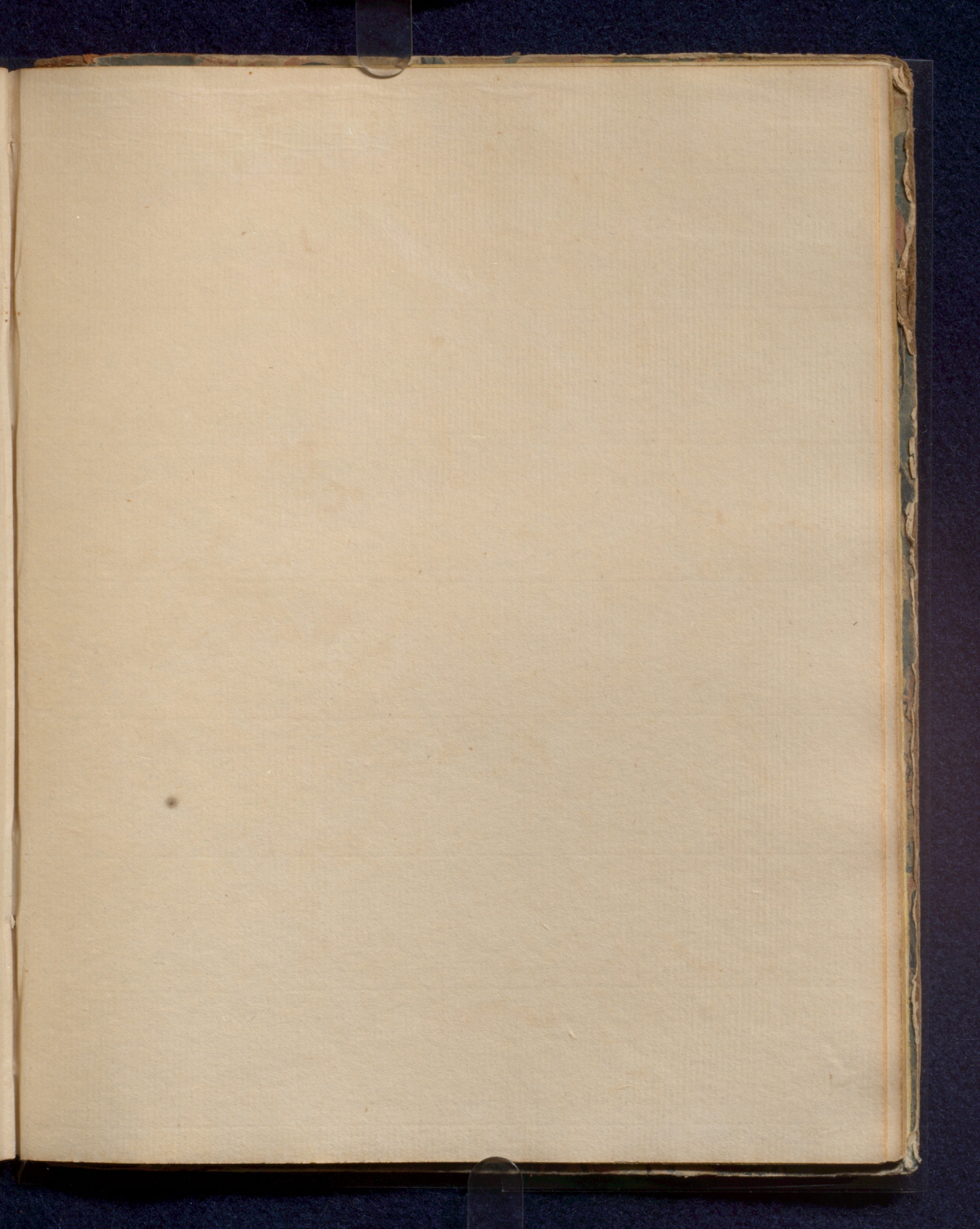


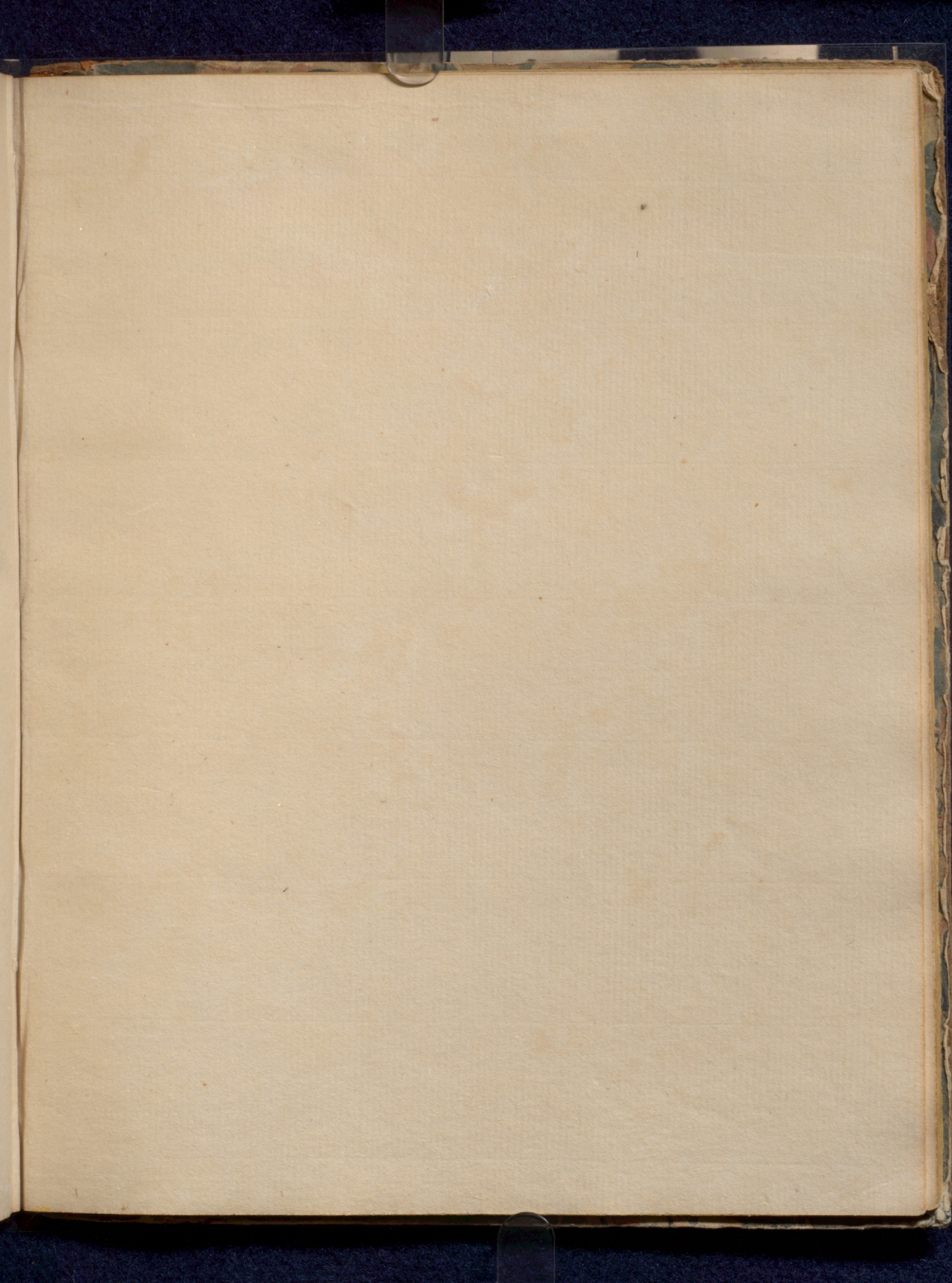


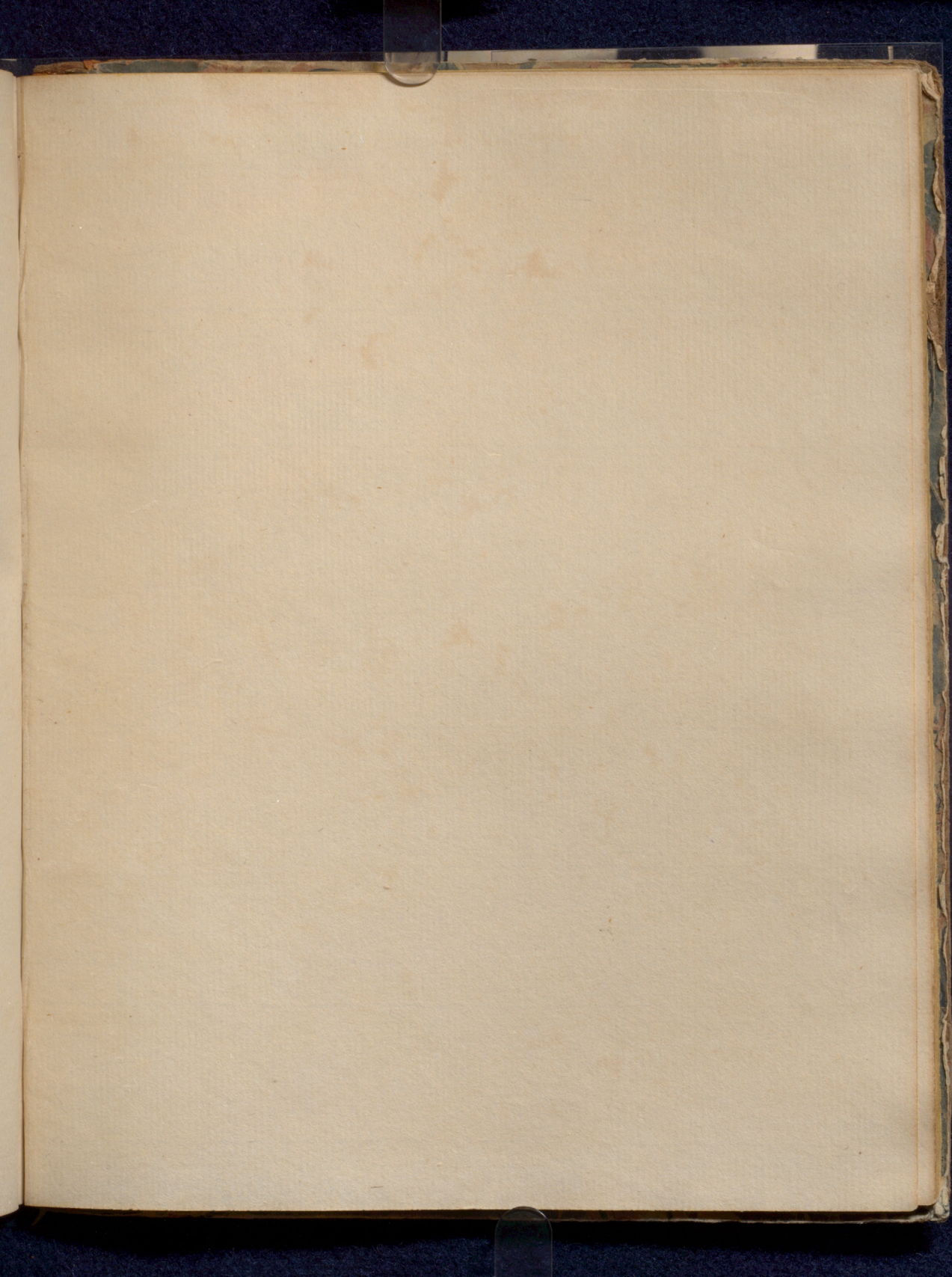


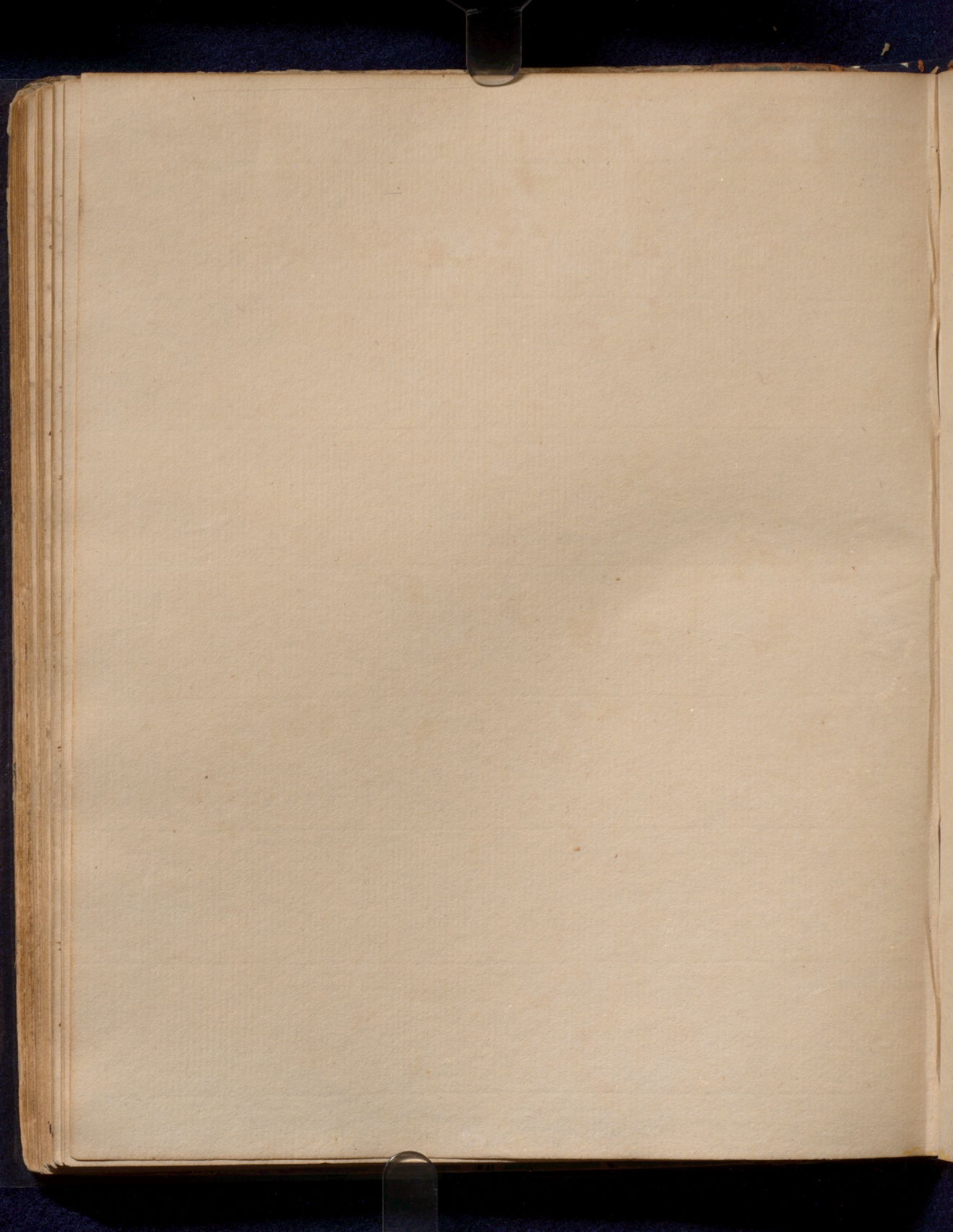


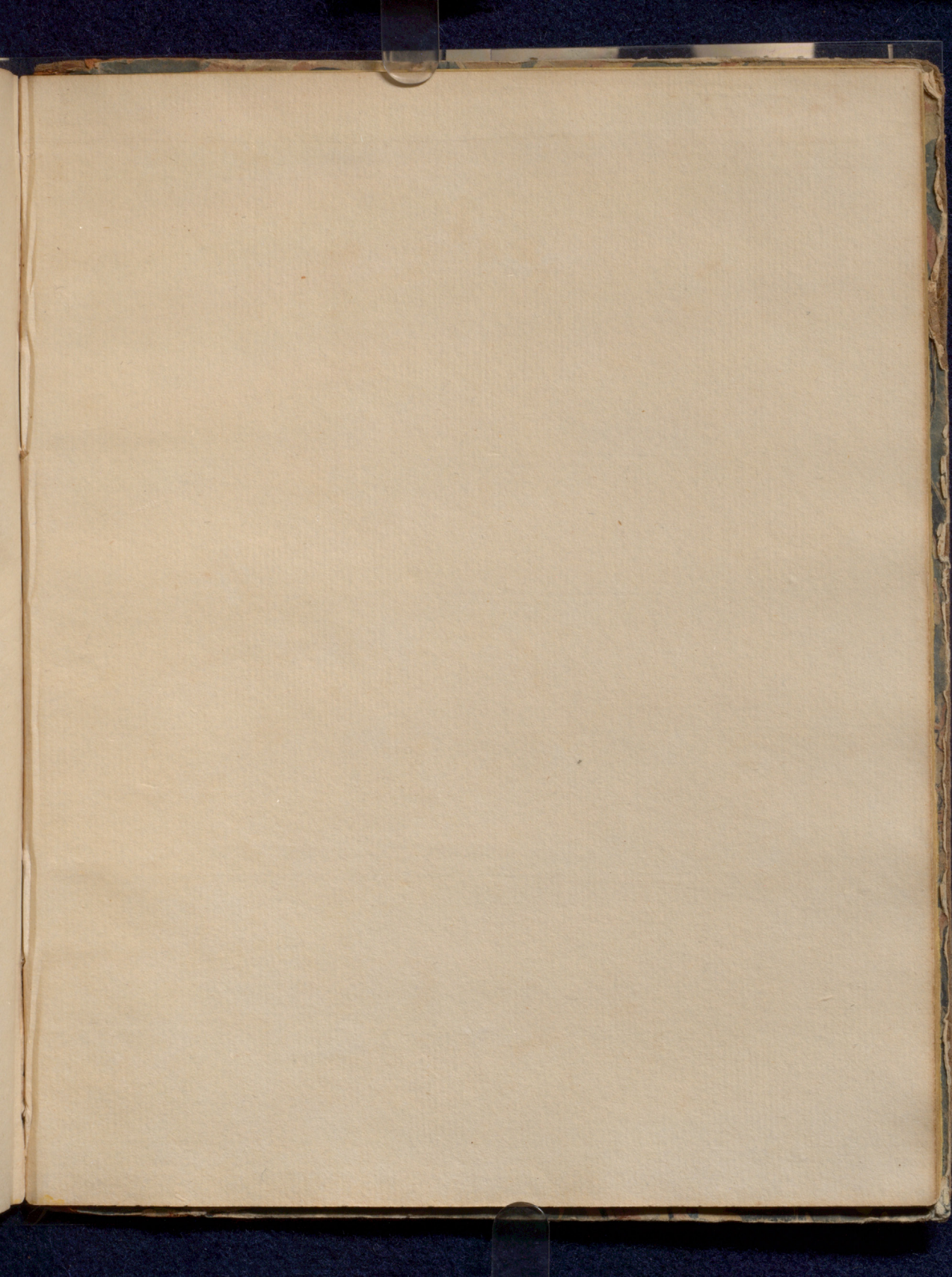


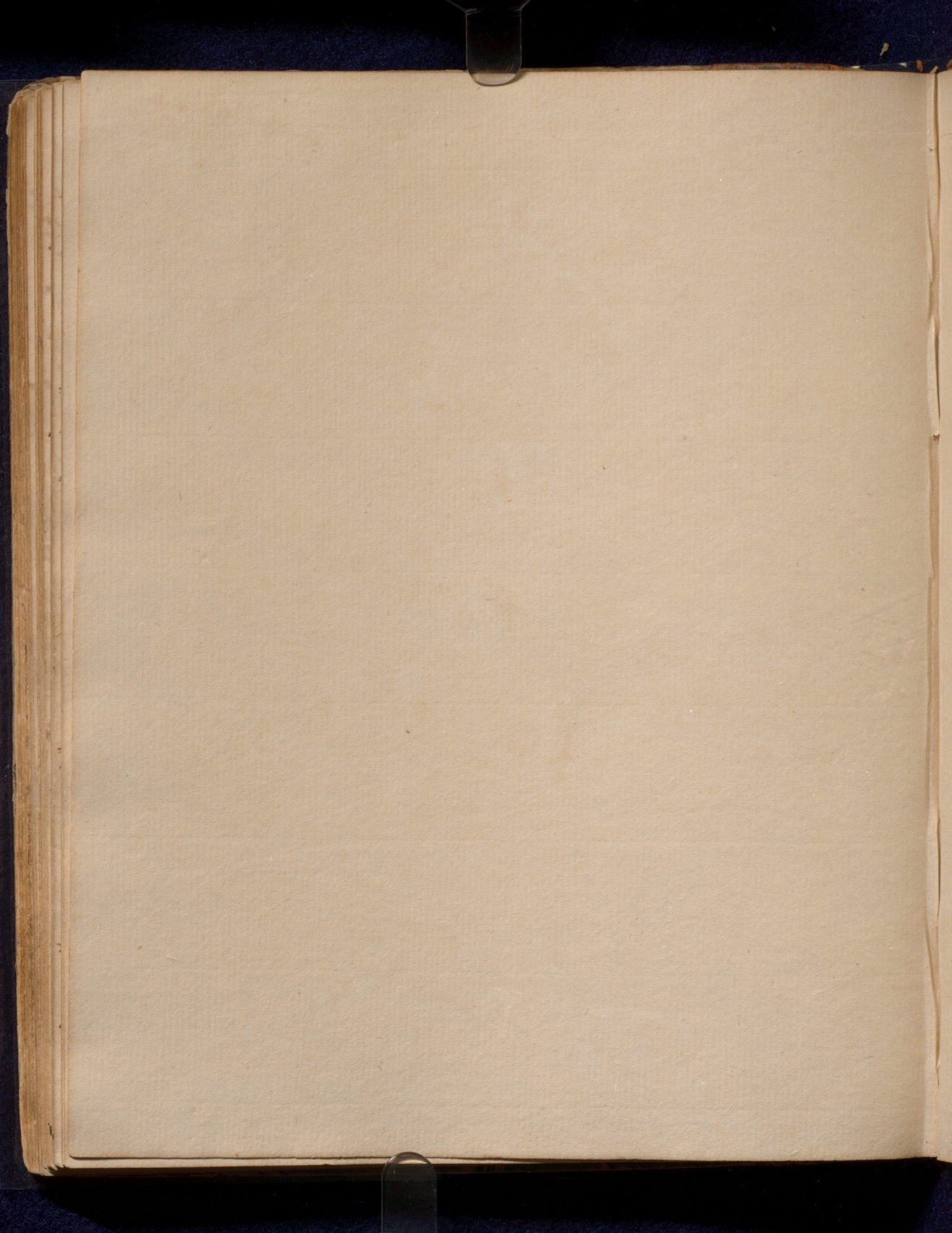


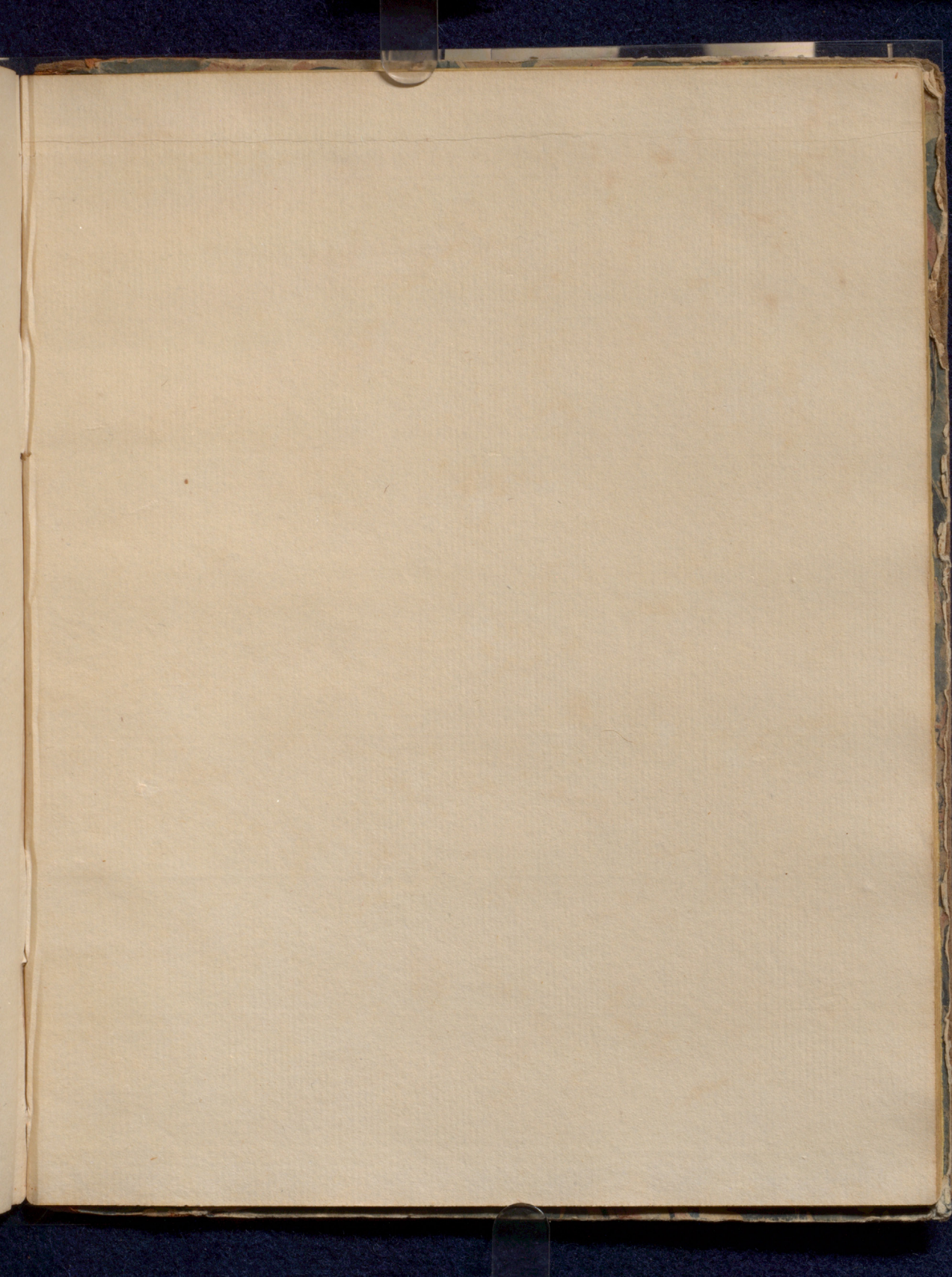


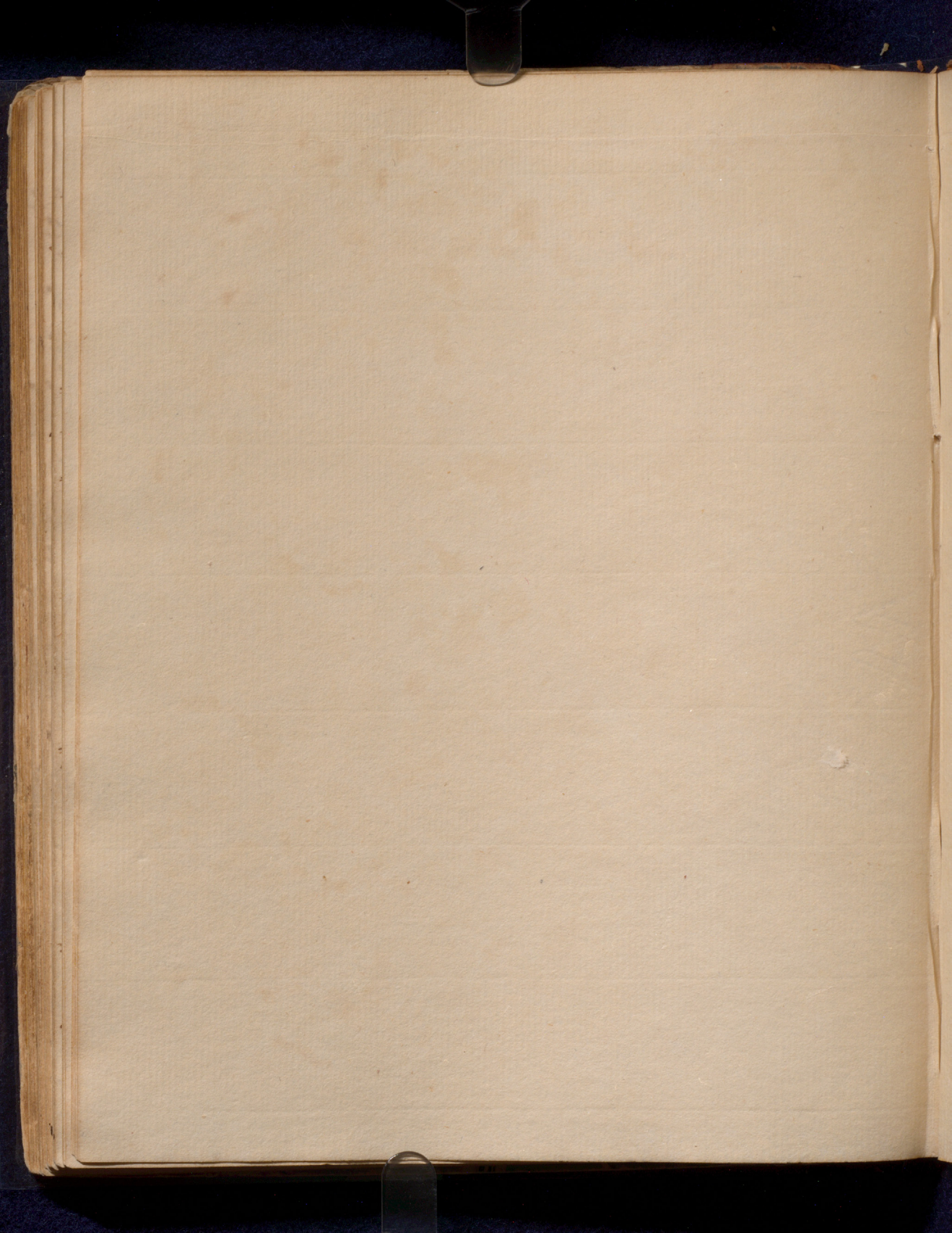


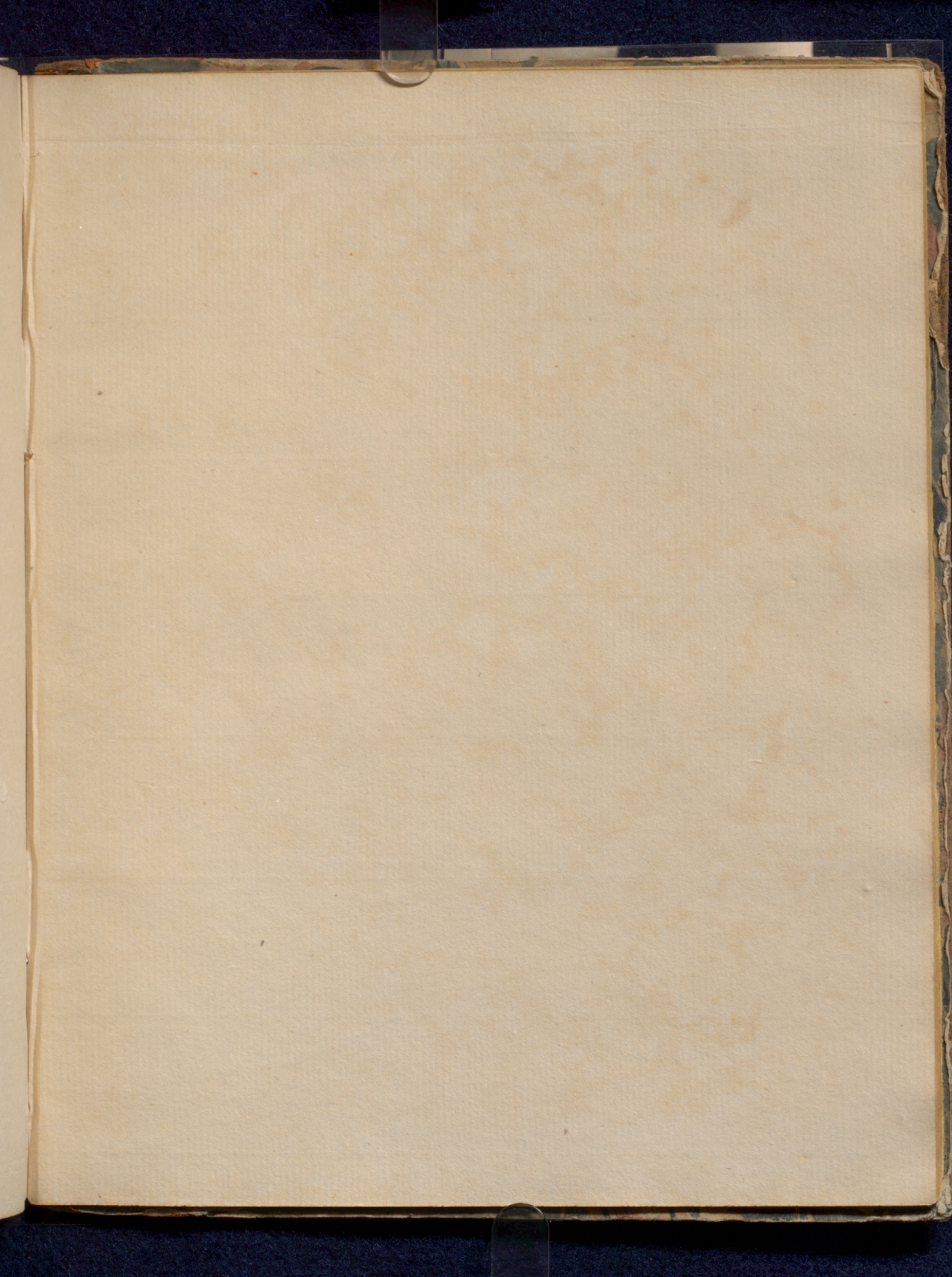


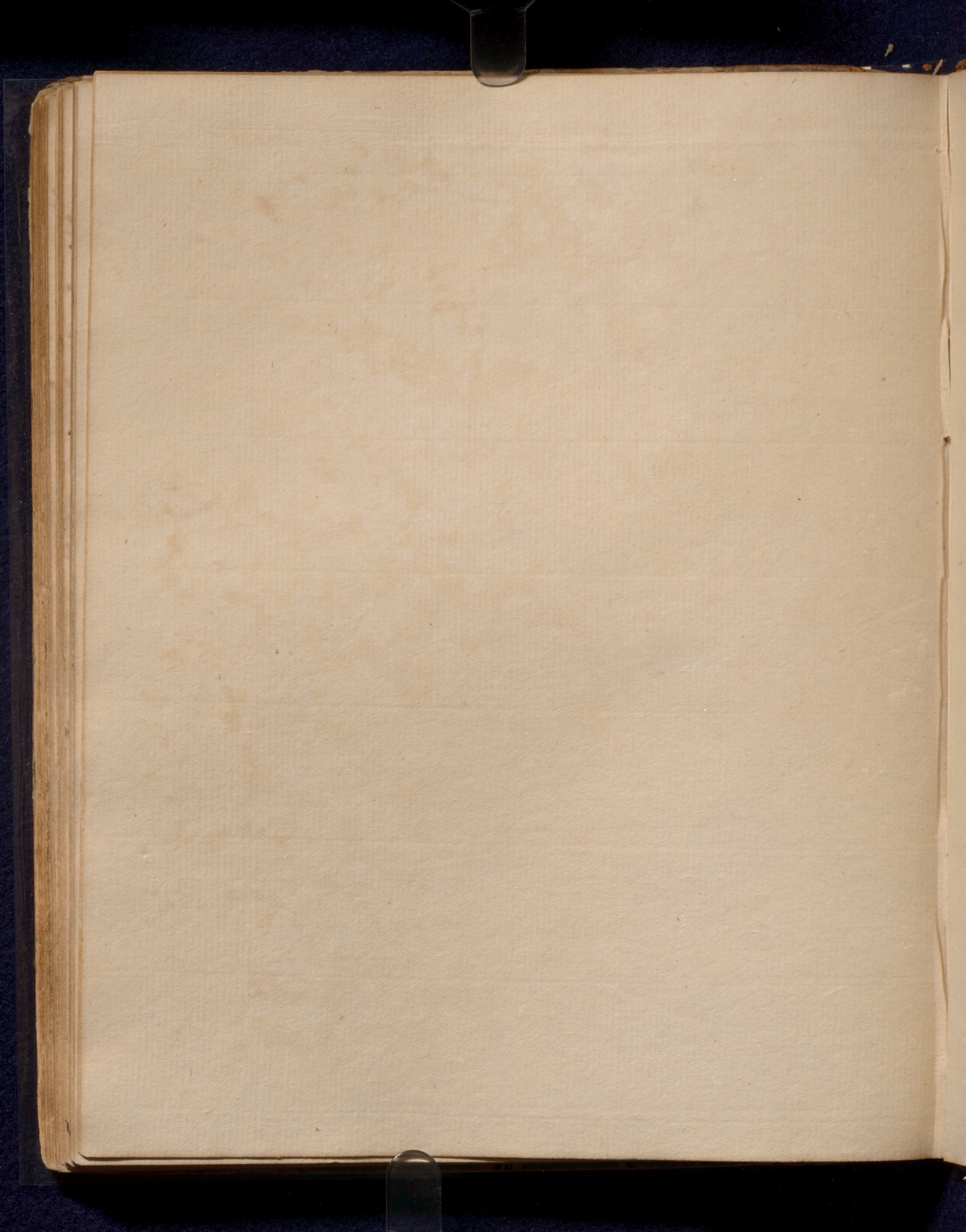


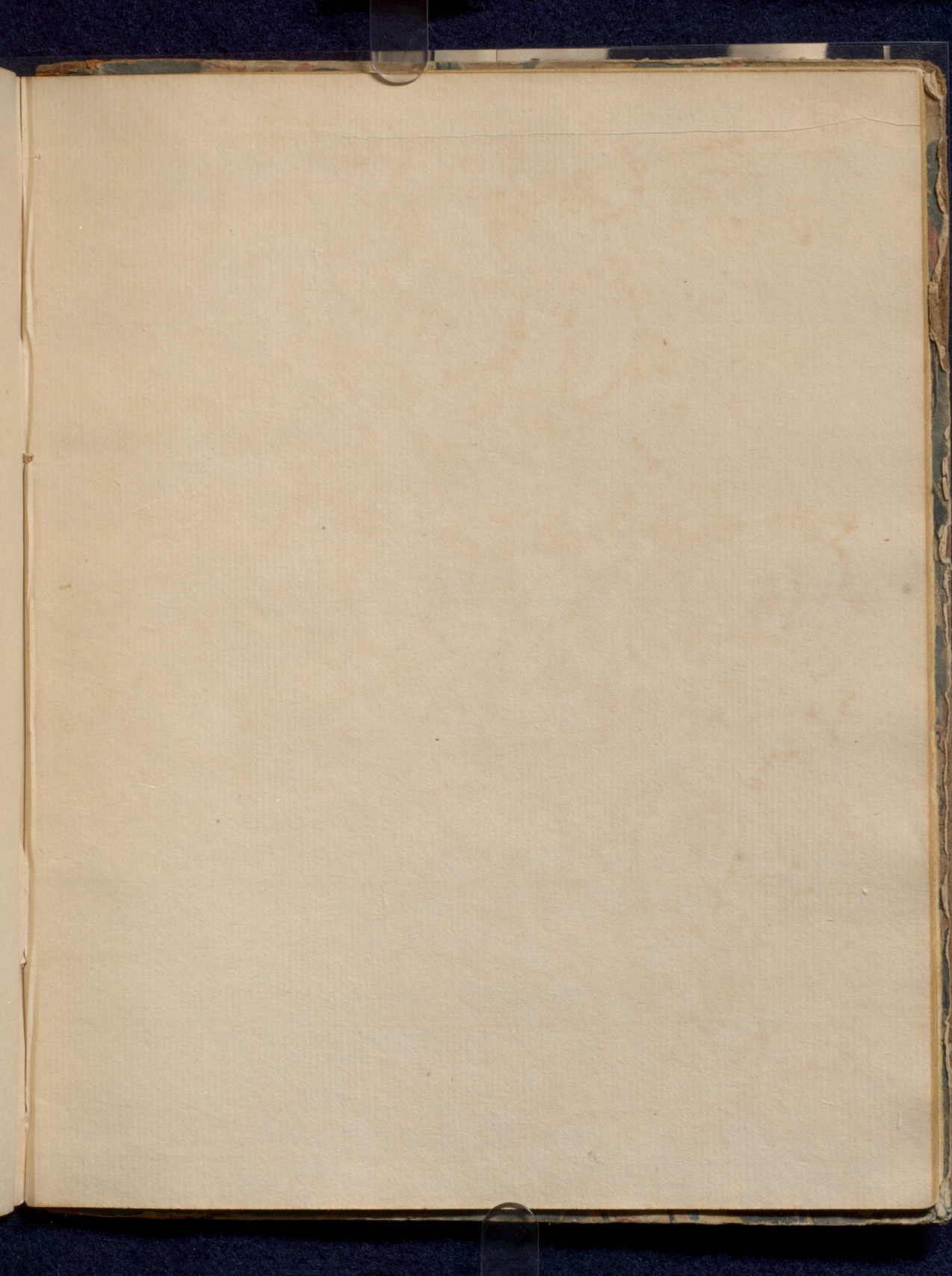


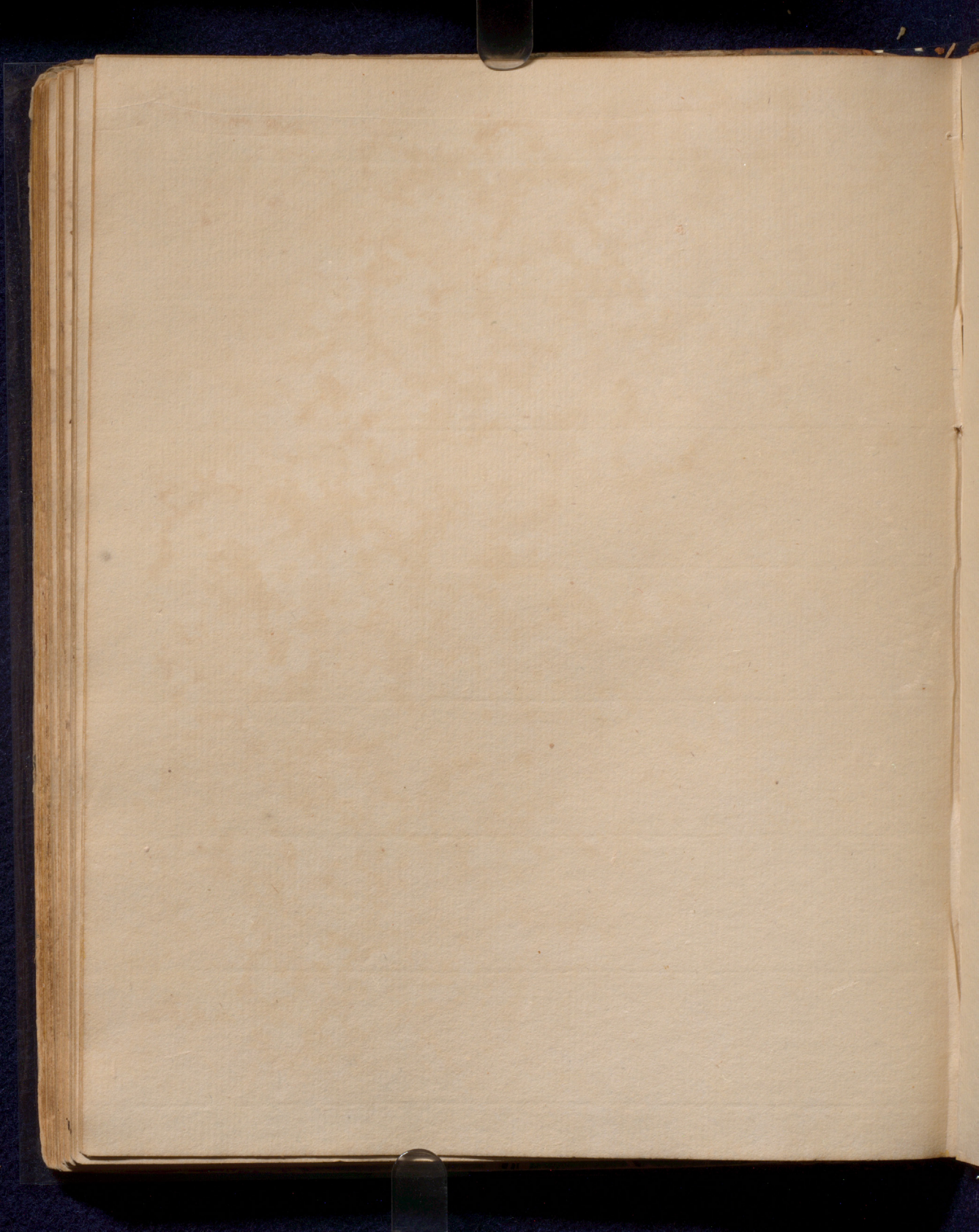


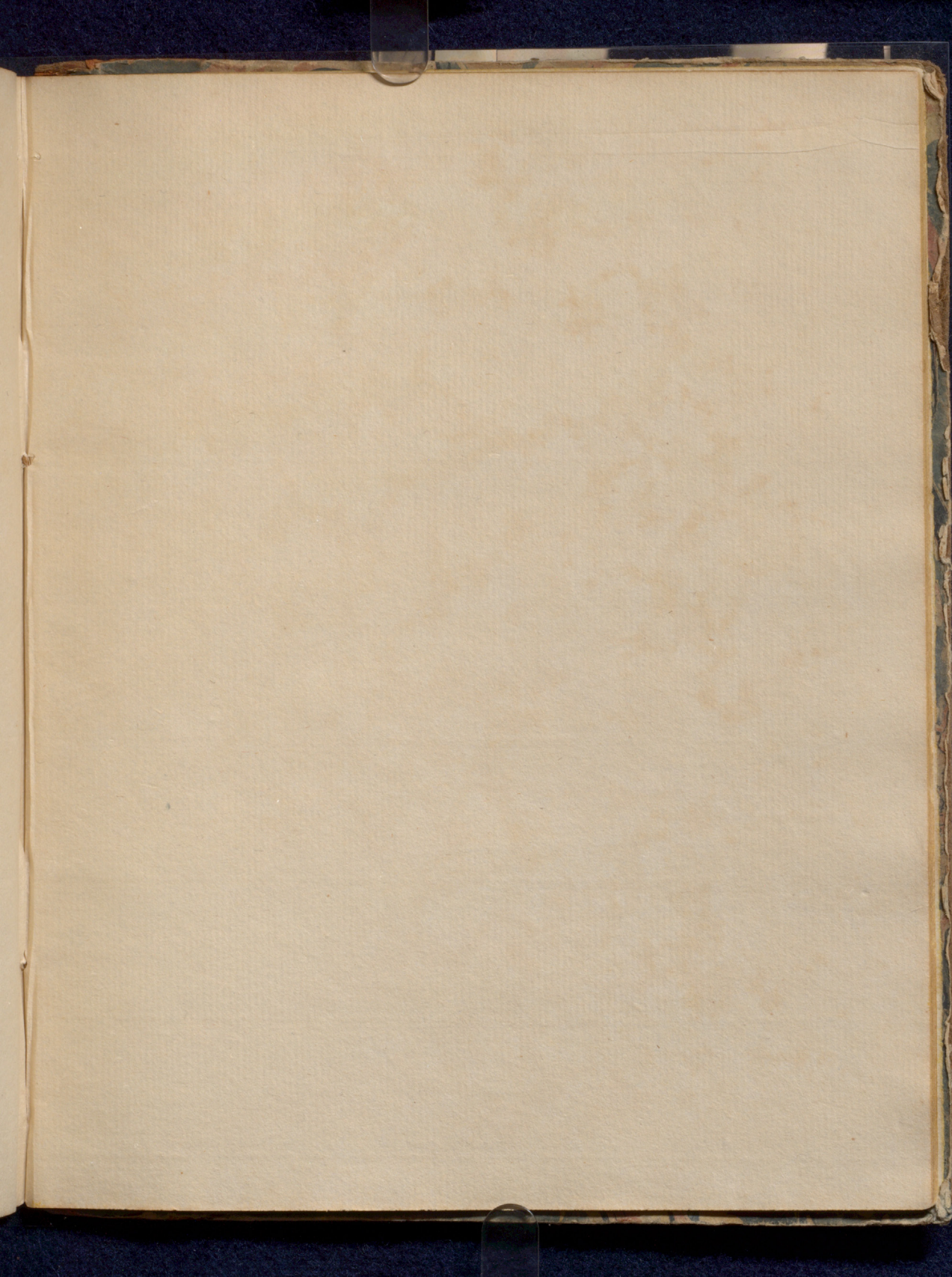


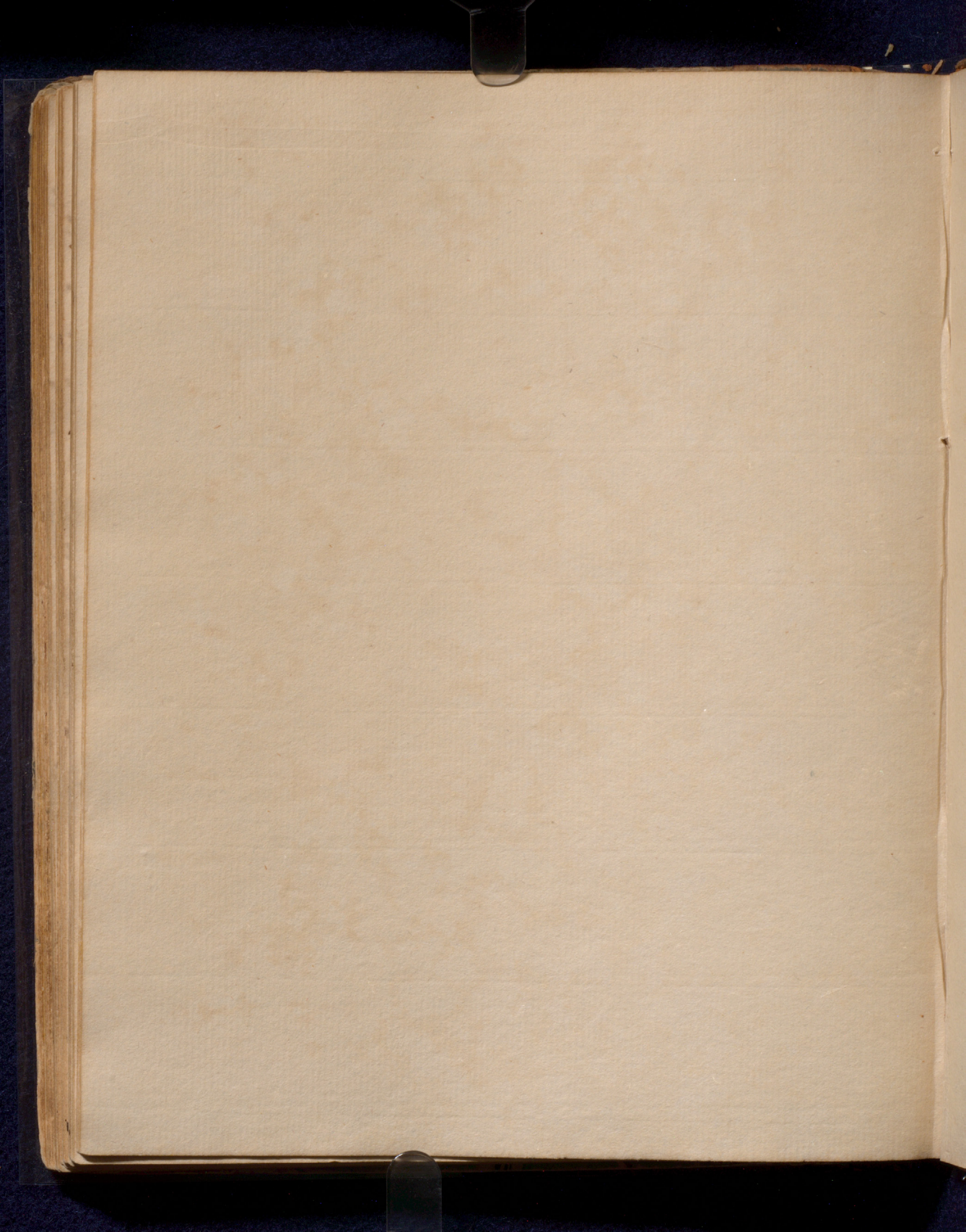


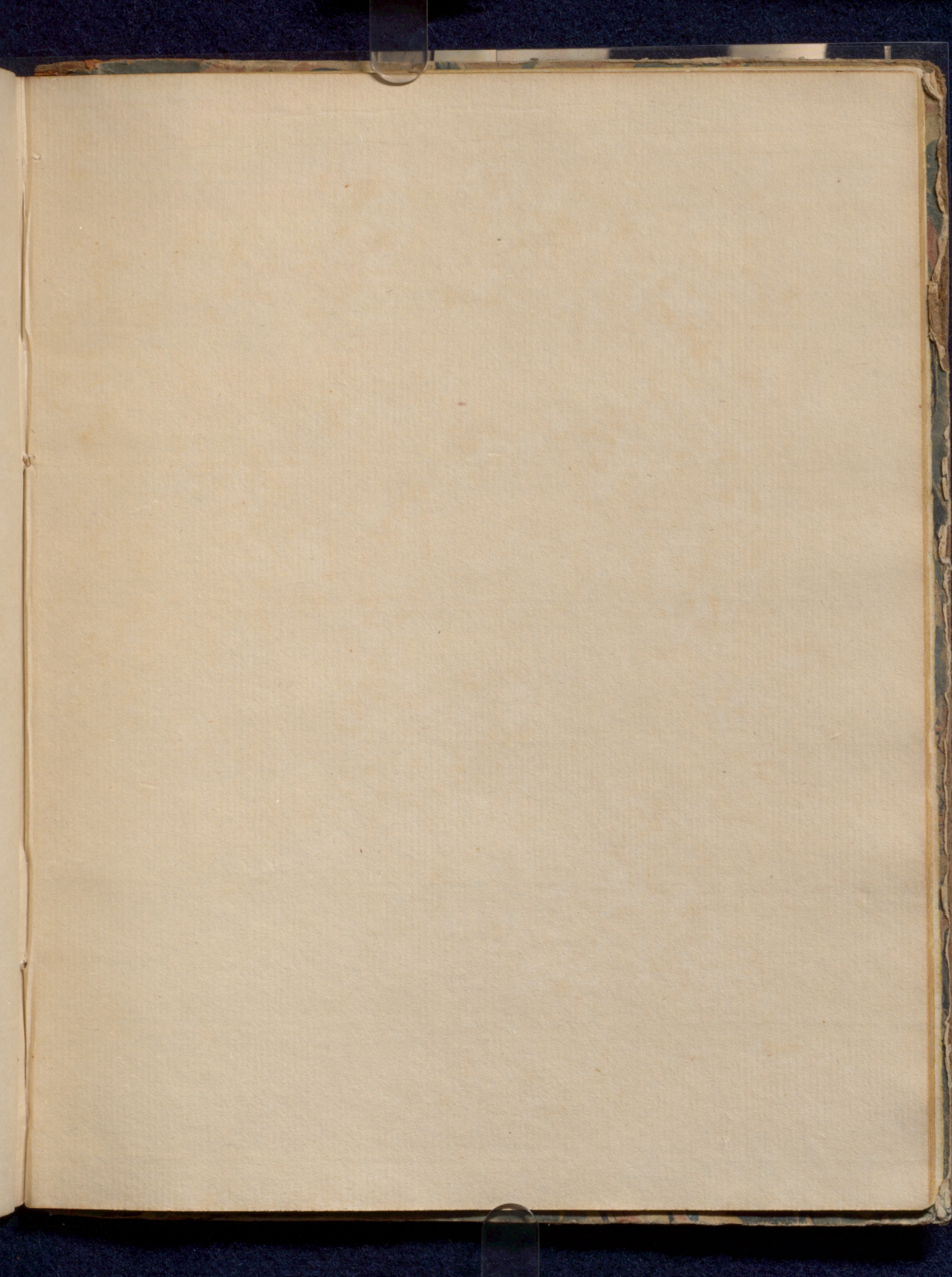


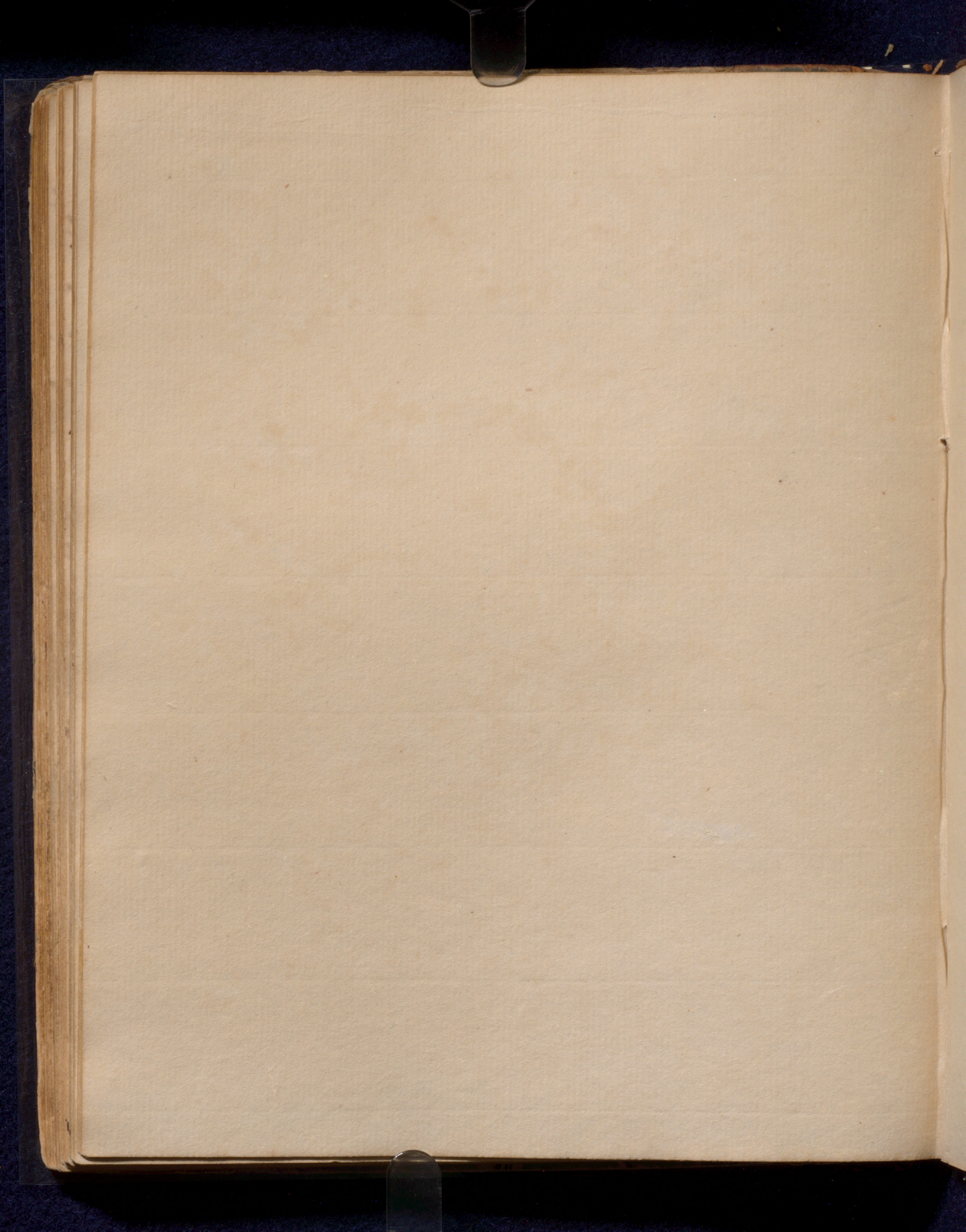


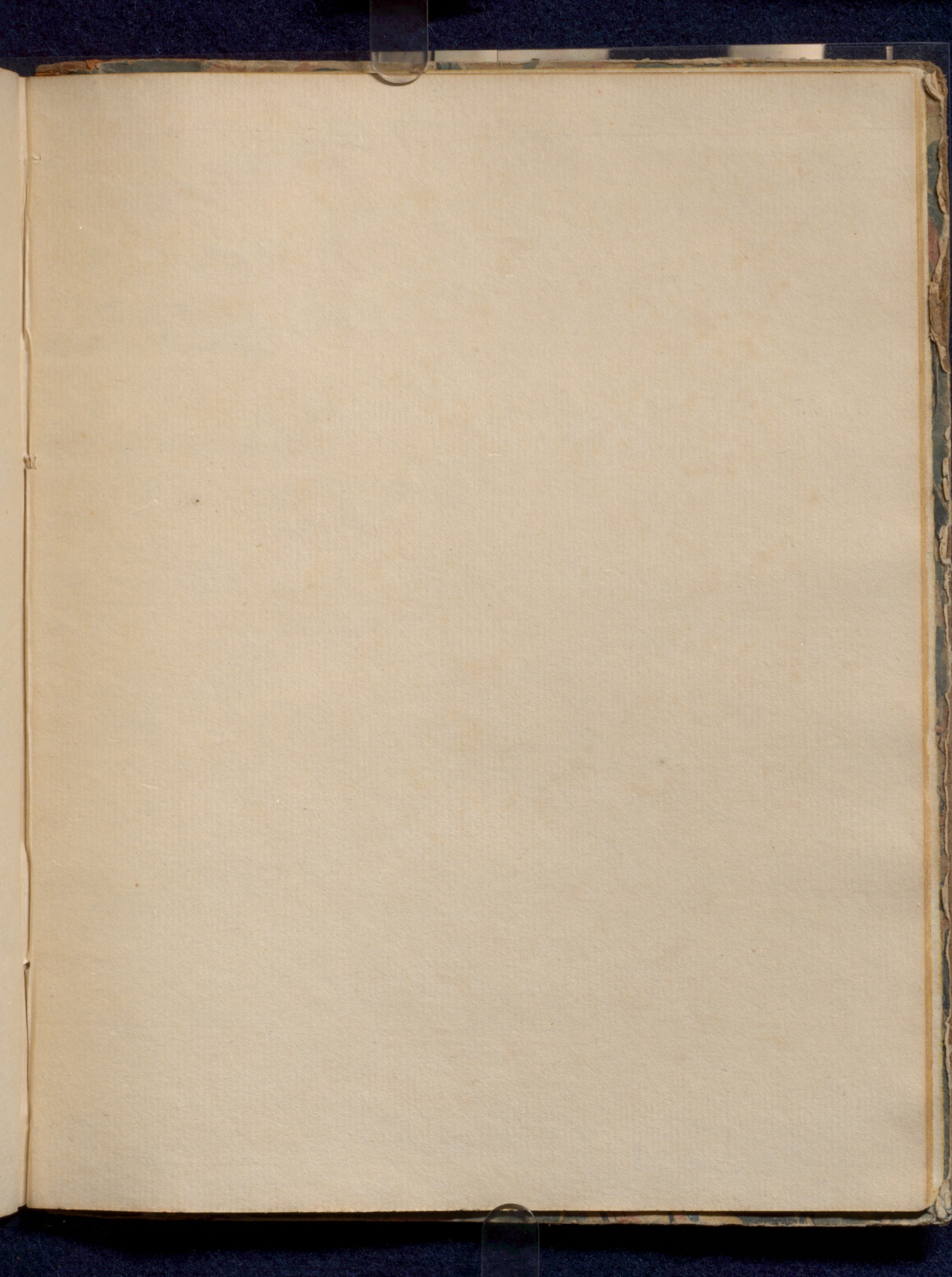


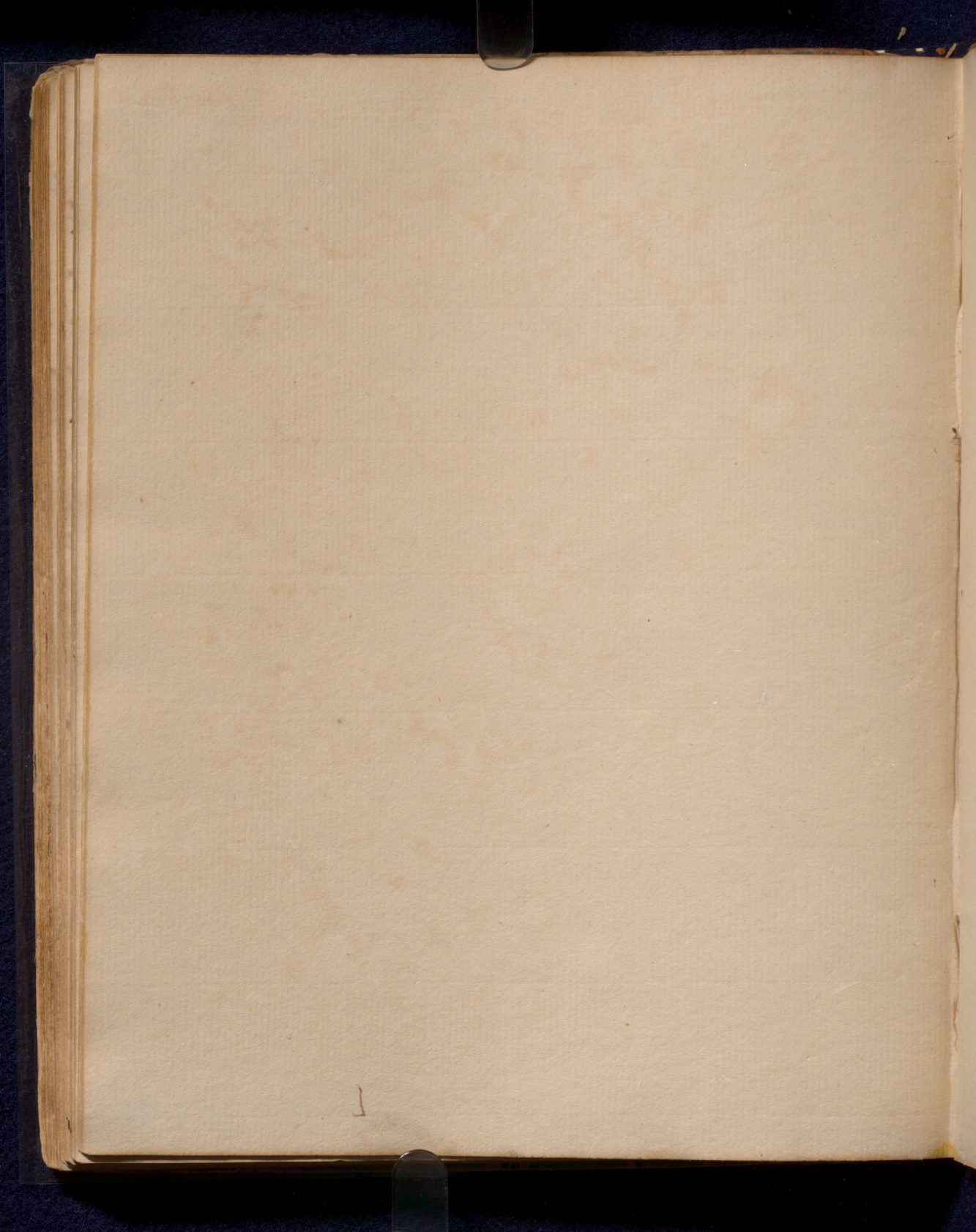


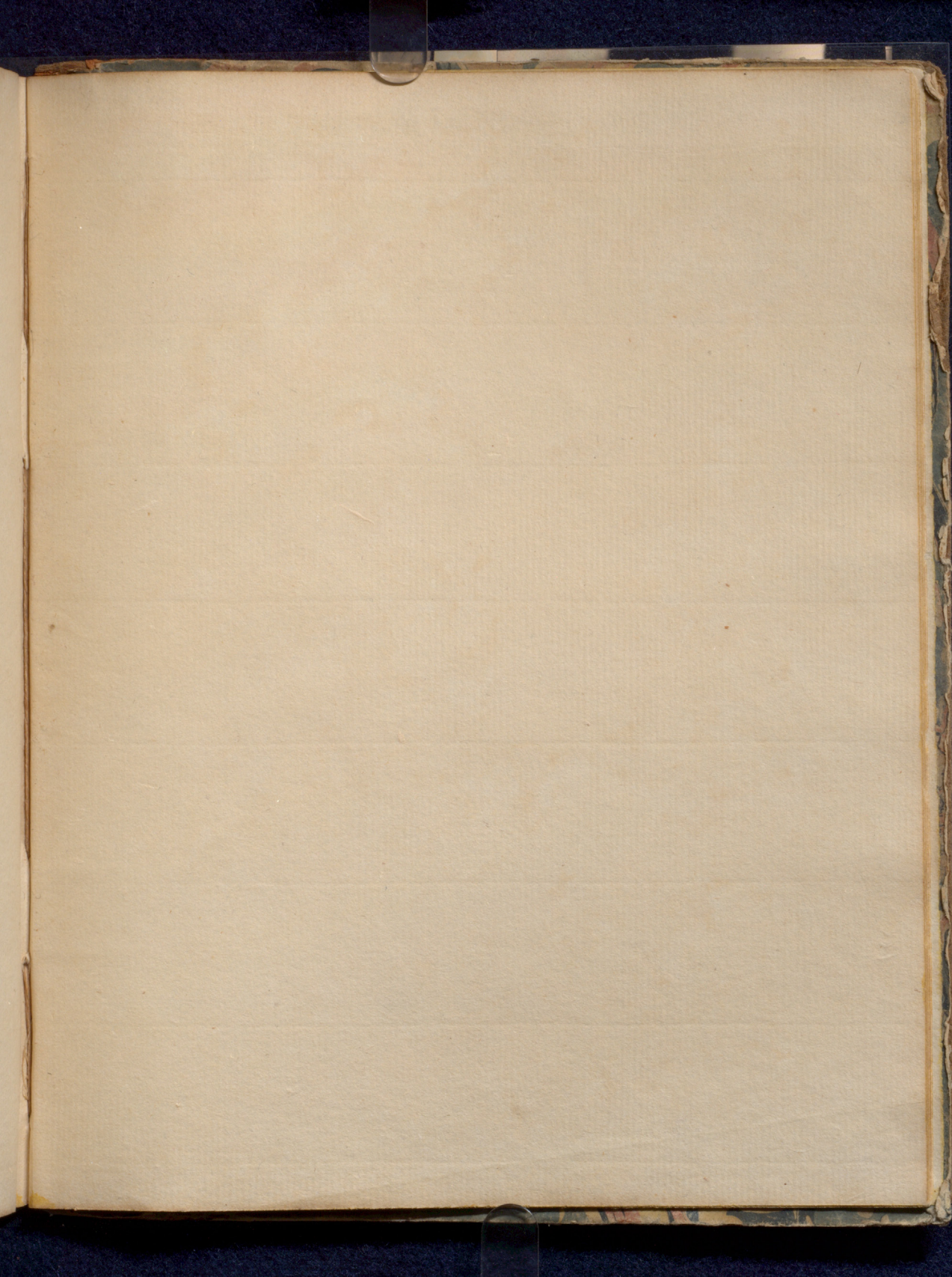


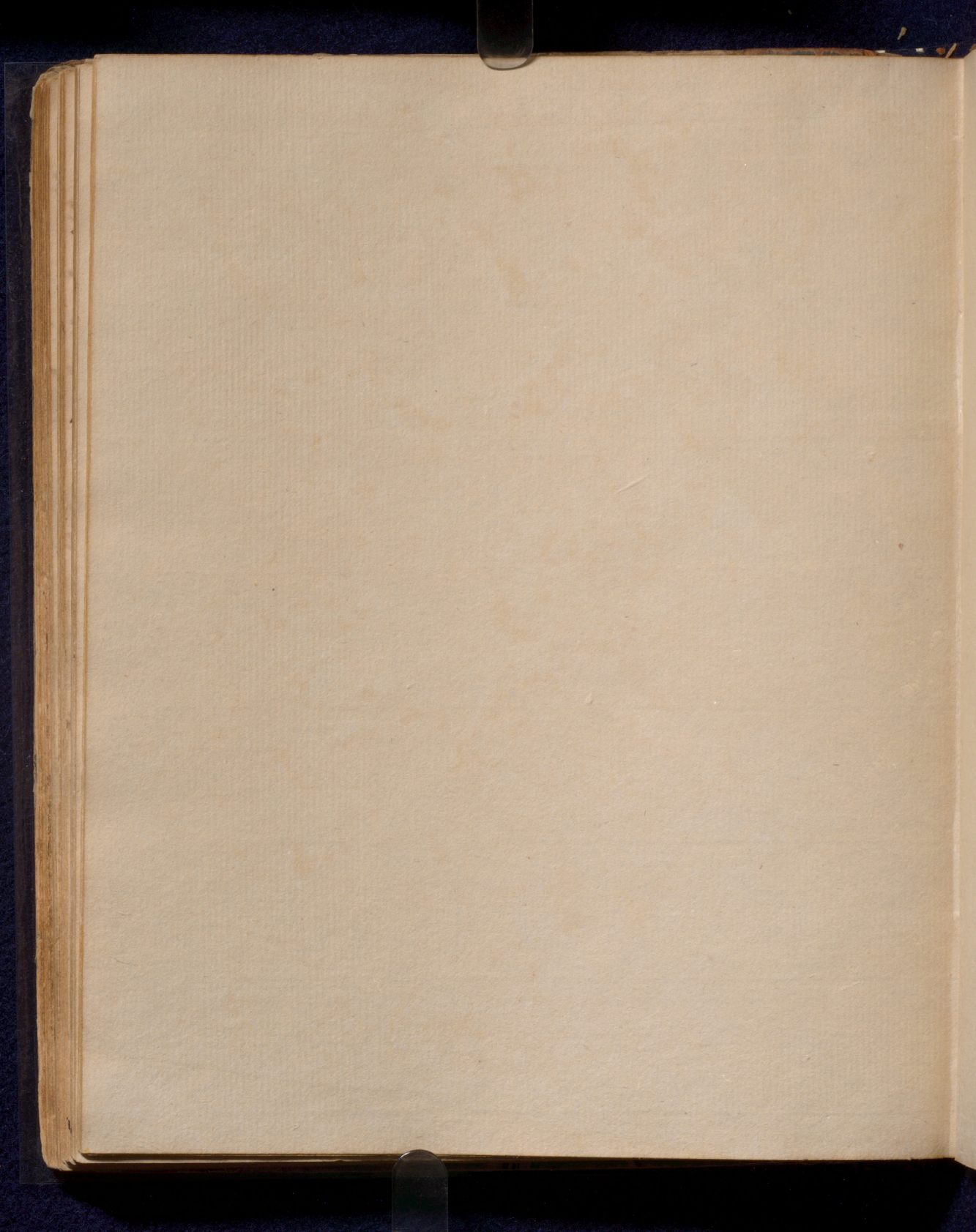


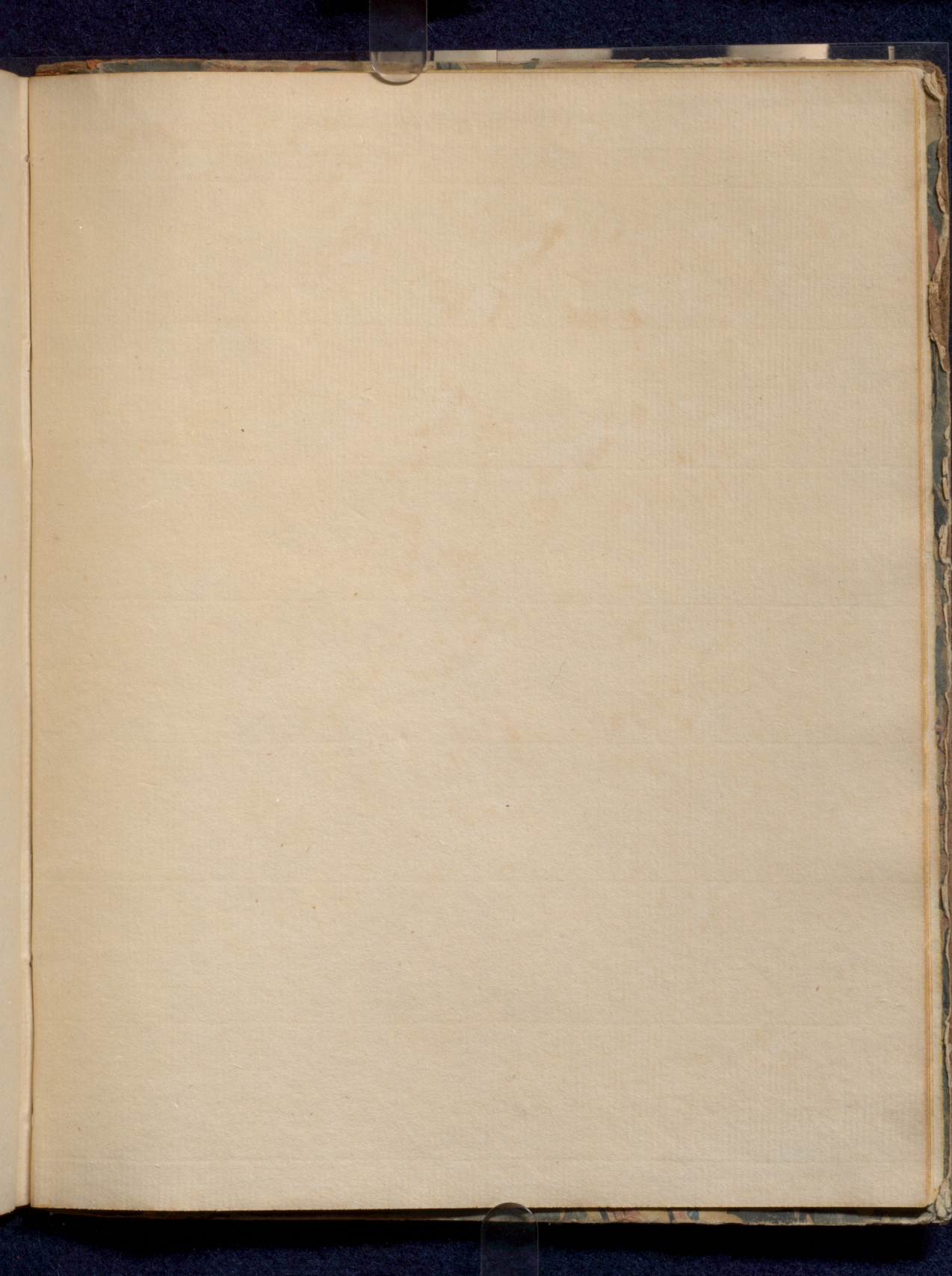


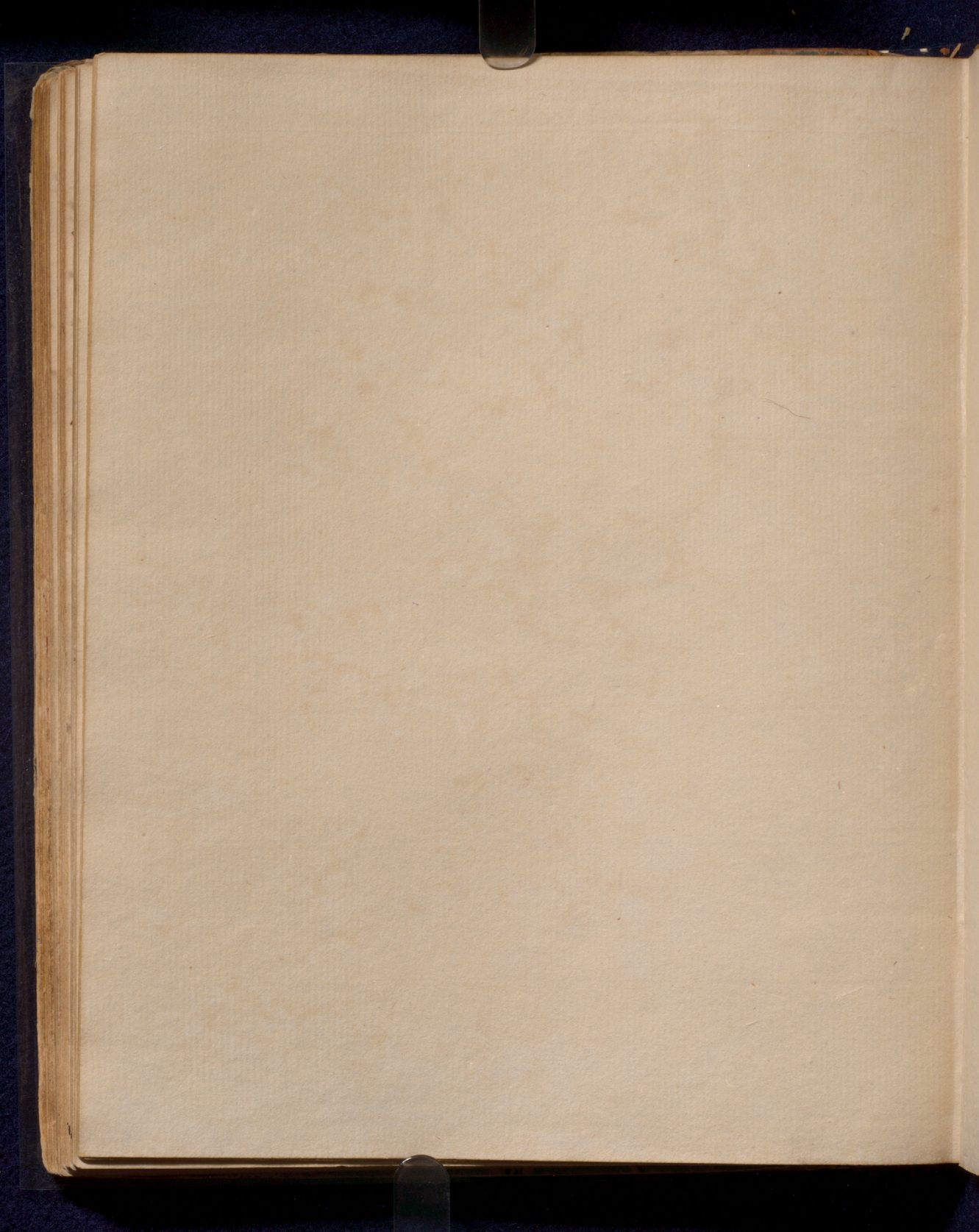


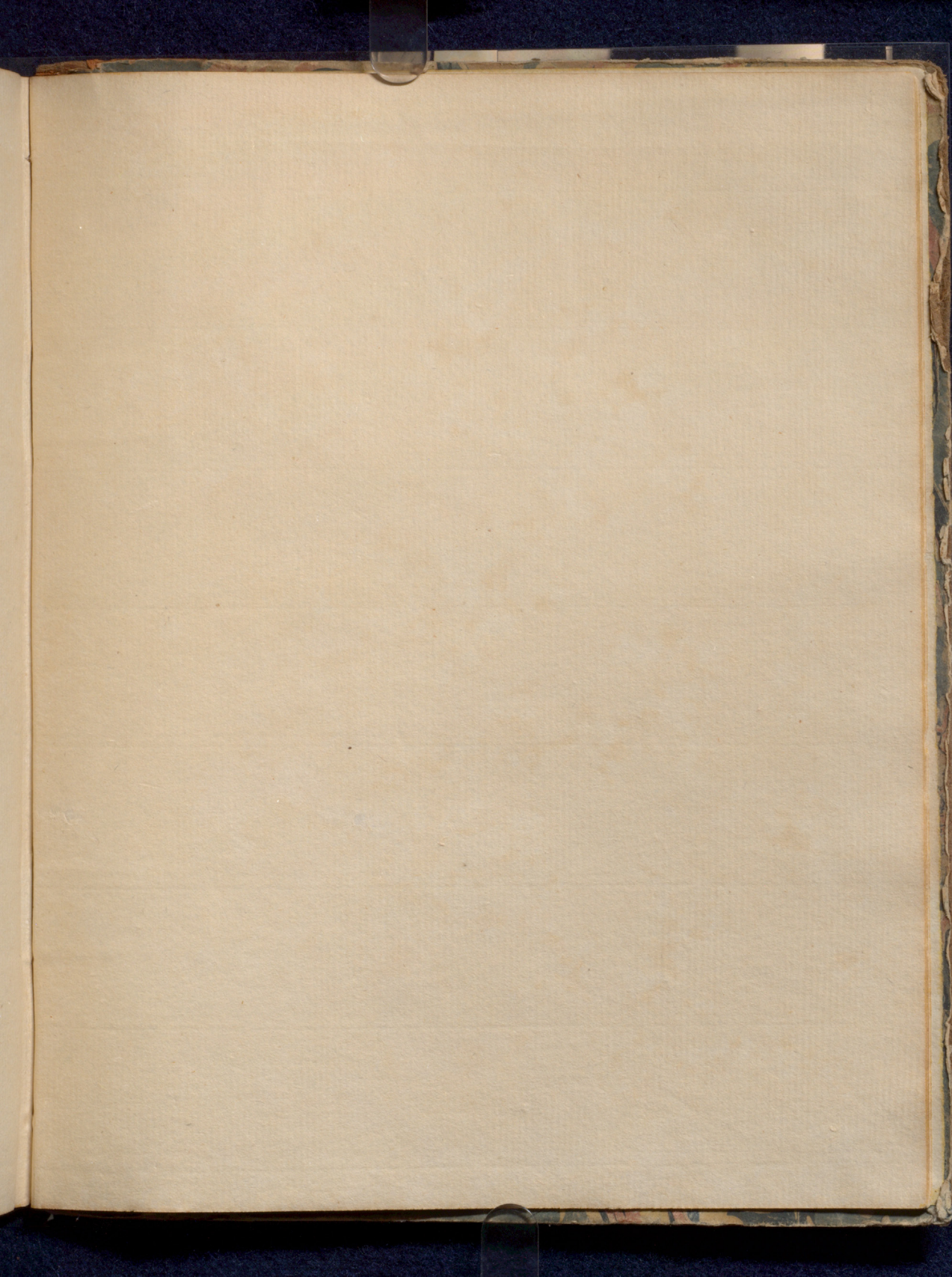


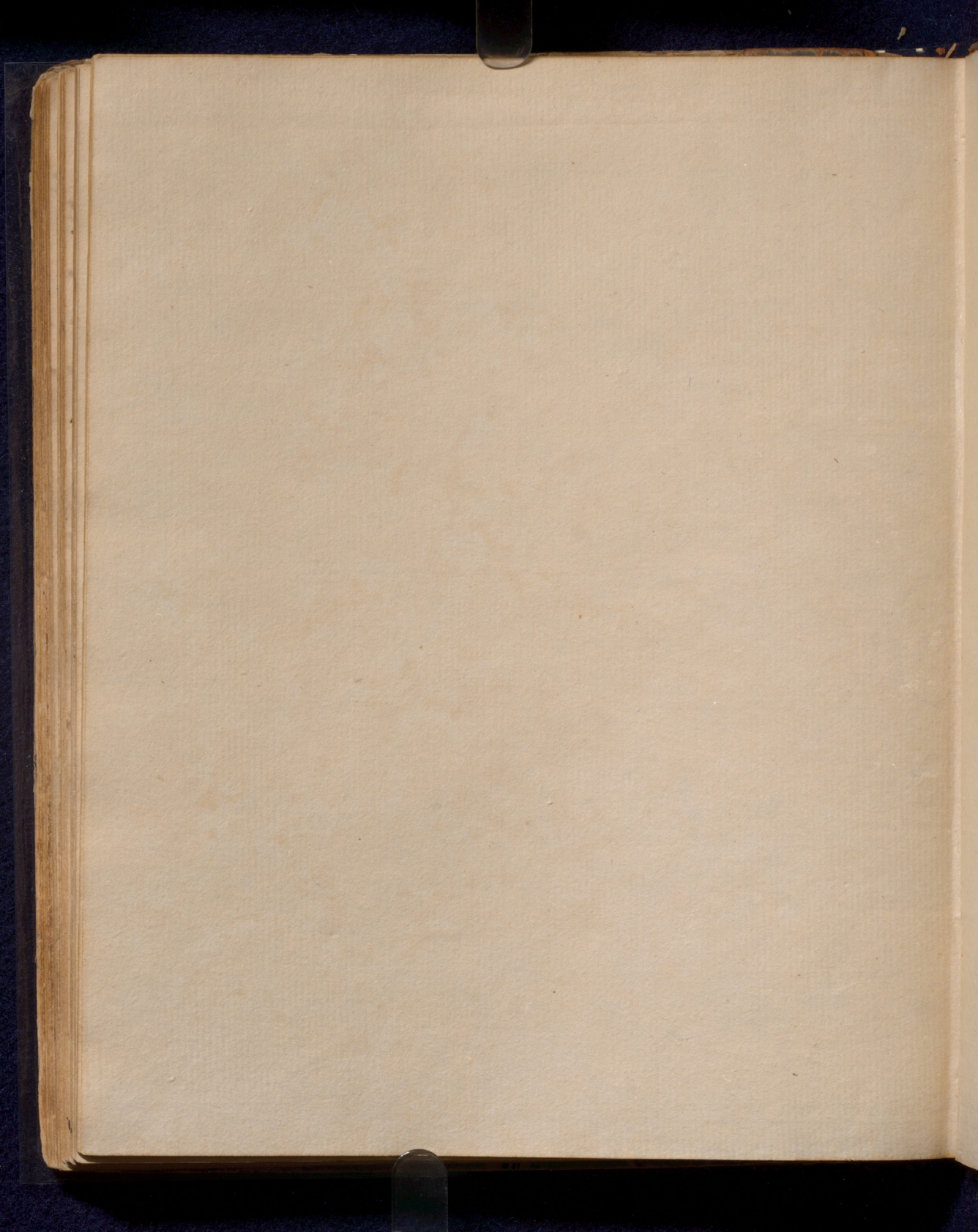


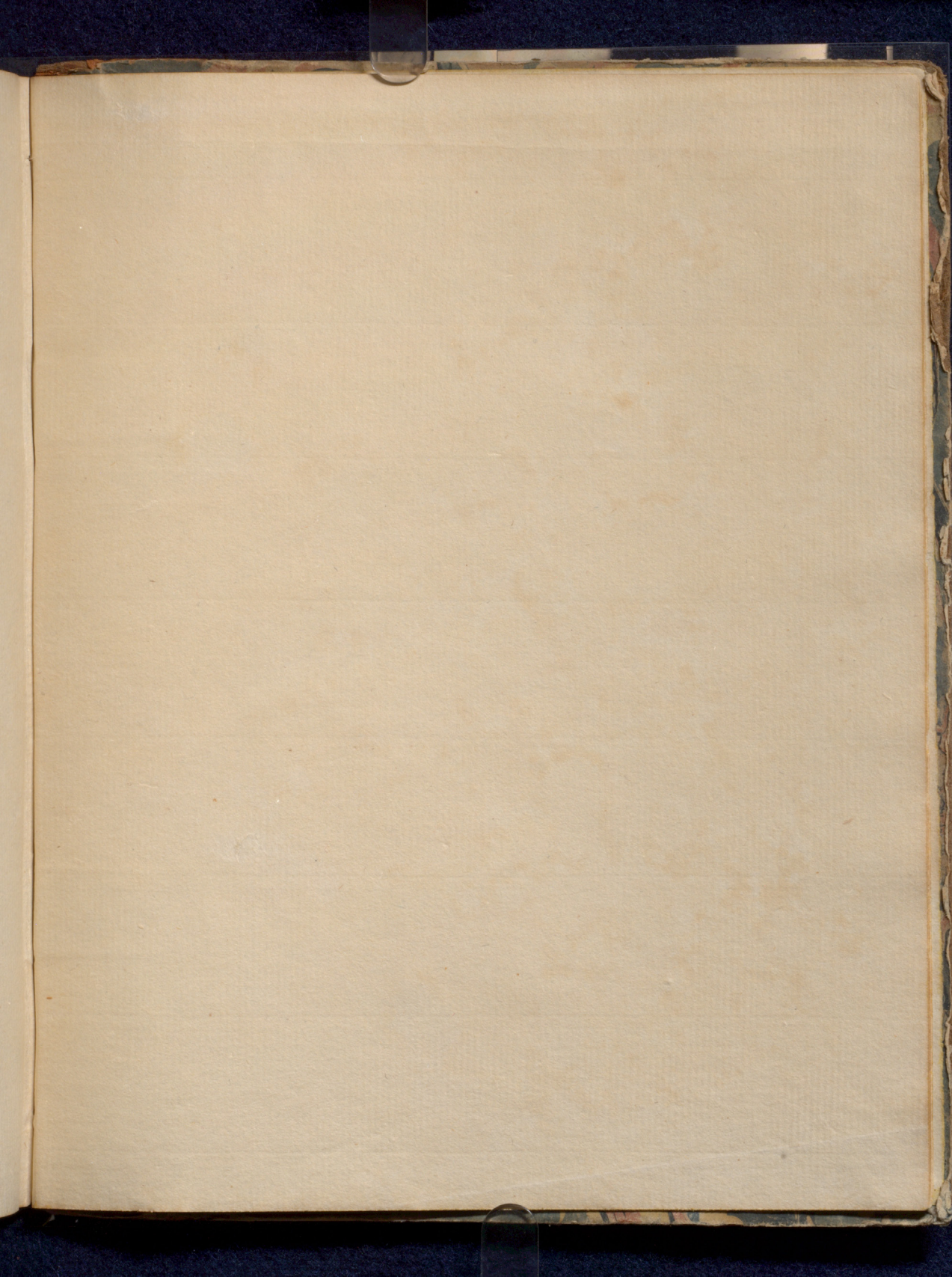


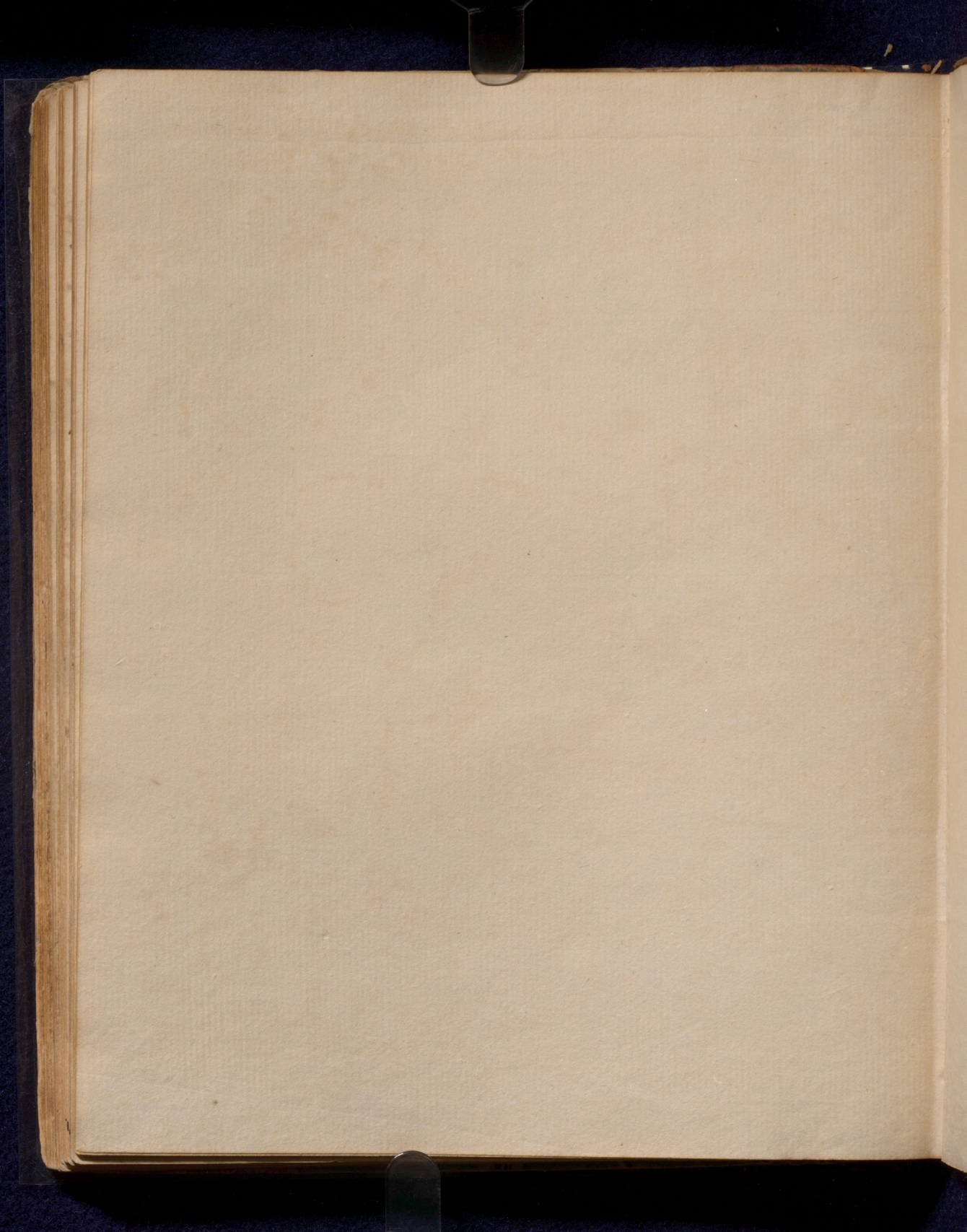


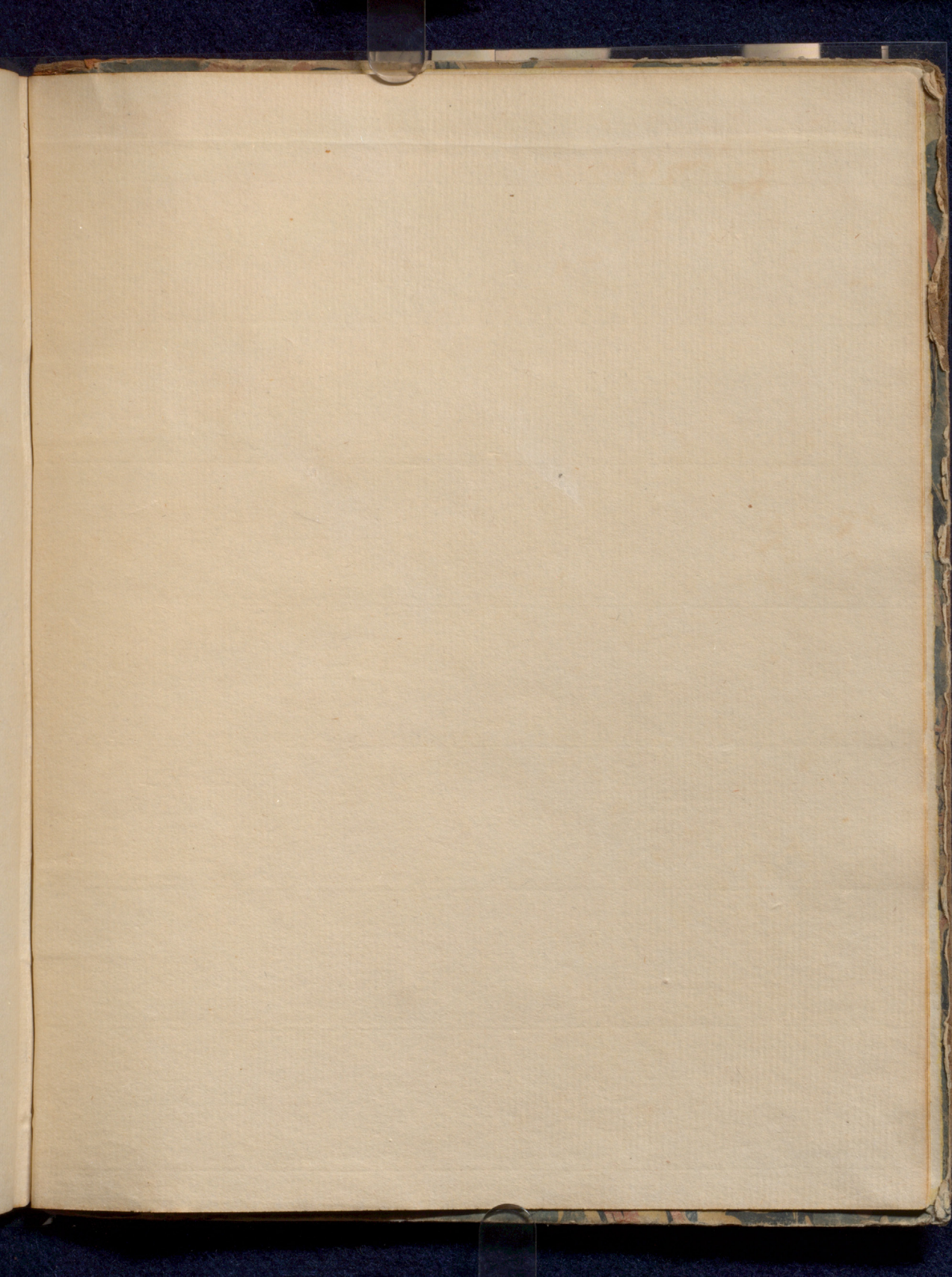


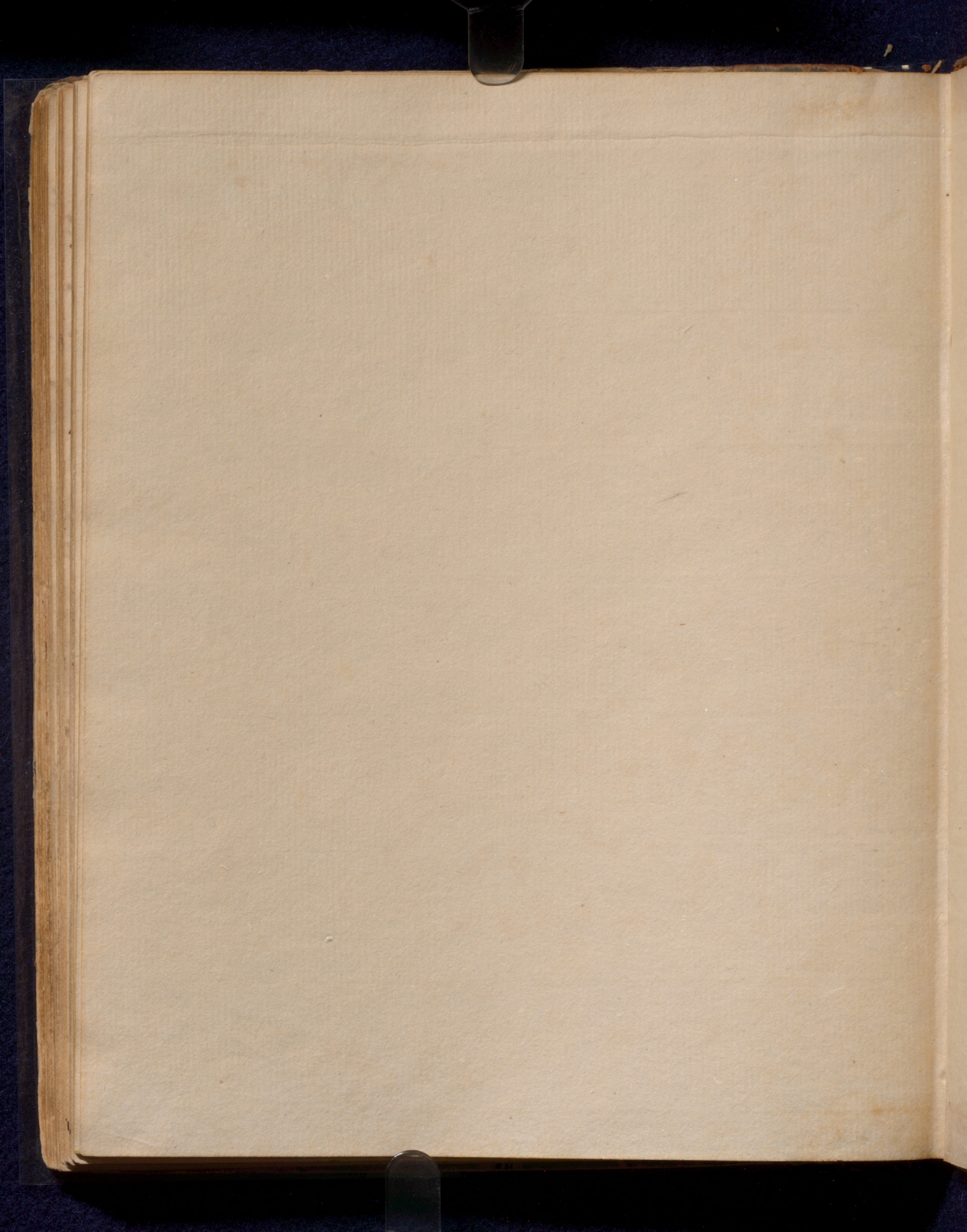


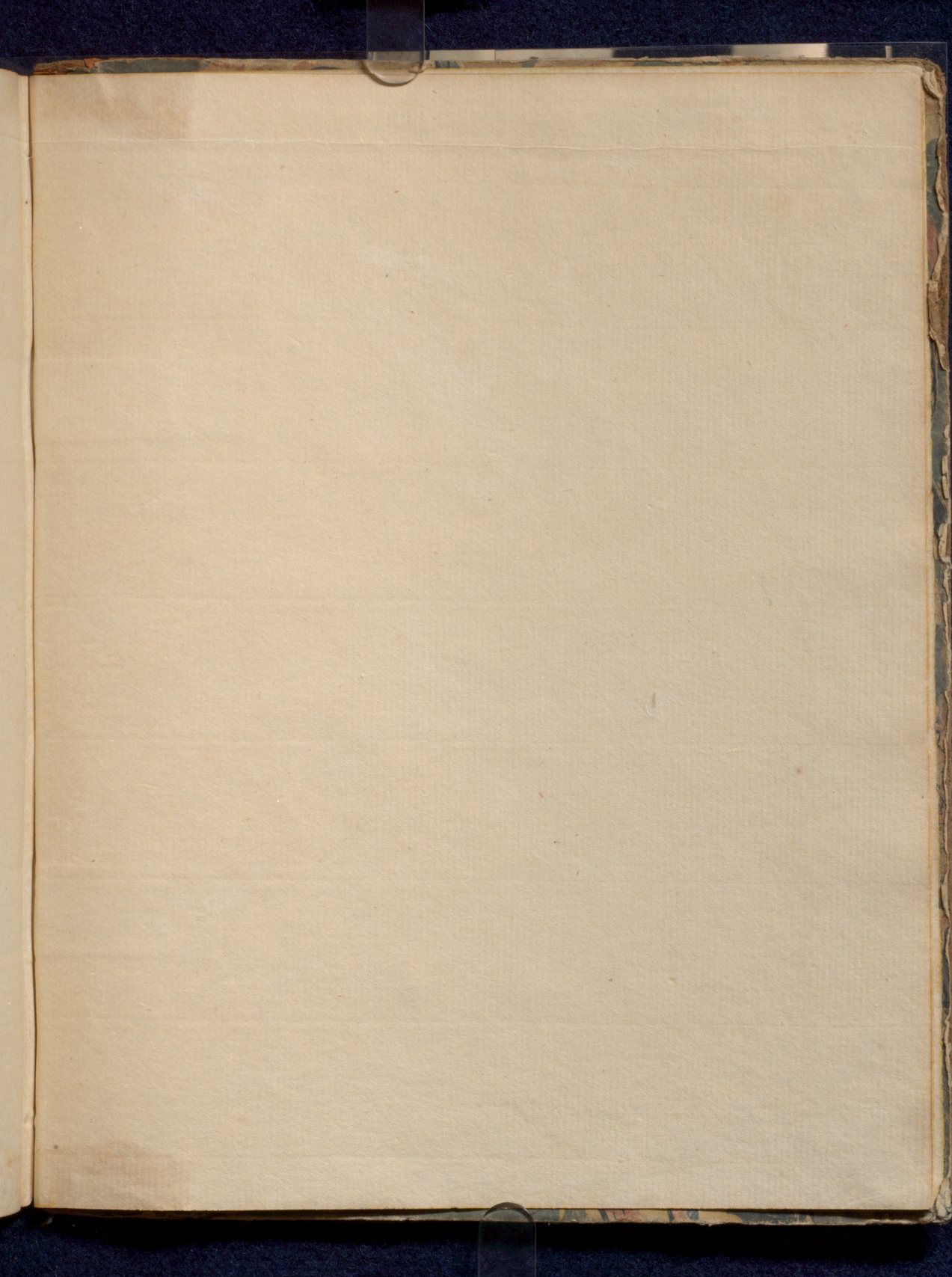


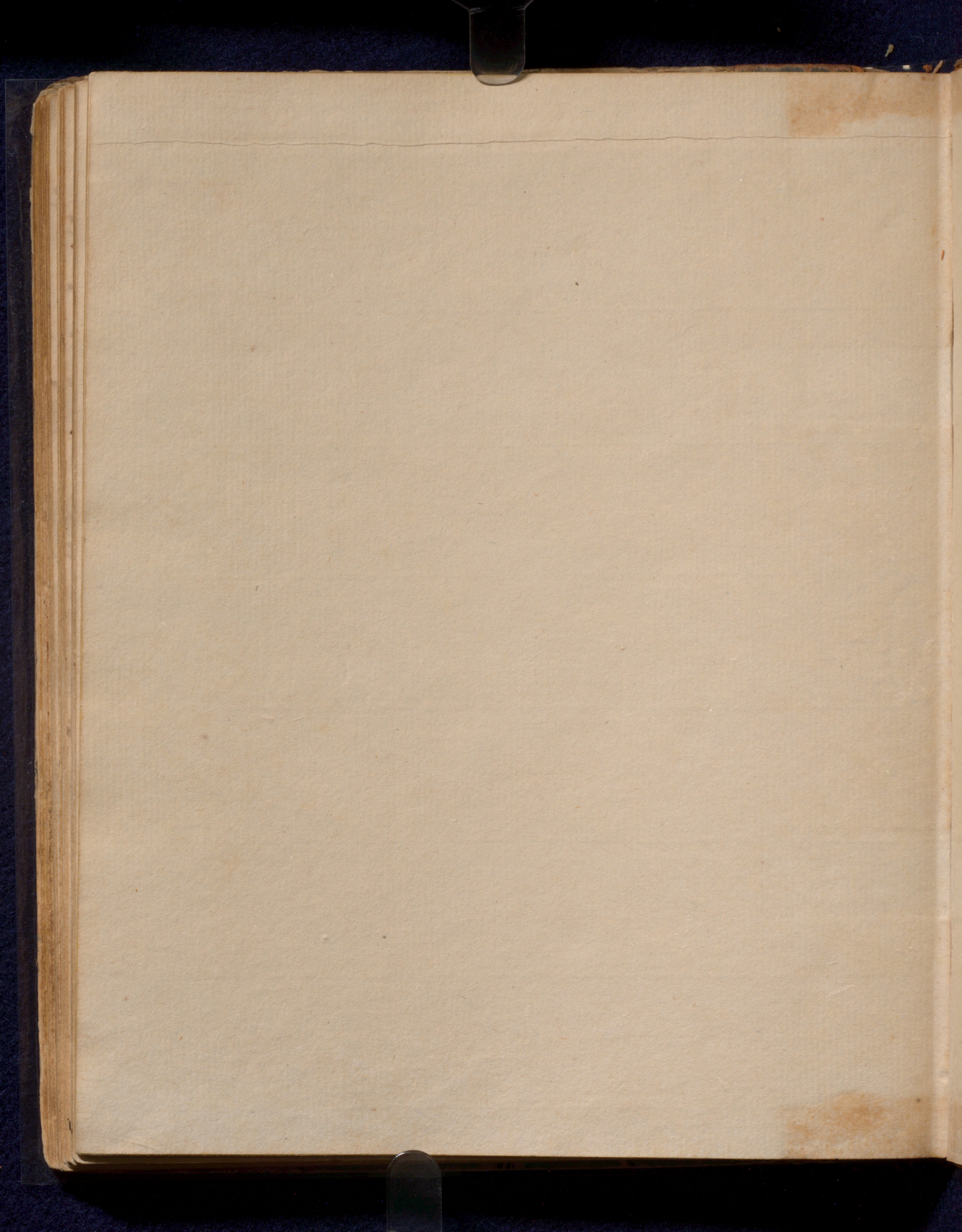


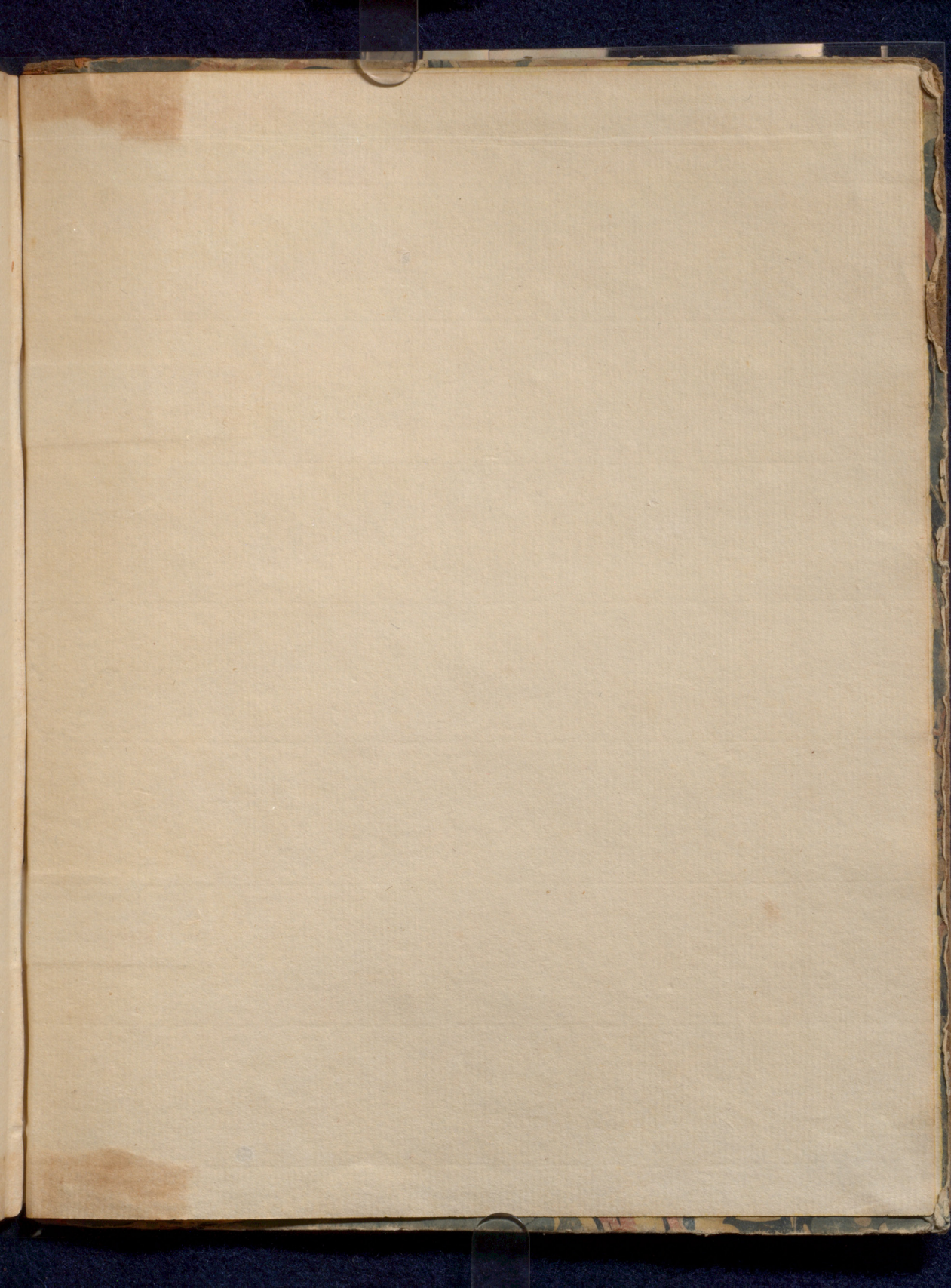












OSLER
Room
W2.260
K 73m
1790

#12603/2656

